Final Removal Action Report

Mansfield Trail Dump Site

Stanhope-Sparta Rd
Byram Township, Sussex County, New Jersey

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Removal Action Activity Report Mansfield Trail Dump Site

Executive Summary

The Mansfield Trail Dump Site (the Site) in Stanhope, New Jersey has been identified as a source of volatile organic compound (VOC) contamination, specifically trichloroethylene (TCE). The contamination is suspected to be the result of septic and other industrial wastes disposed in constructed trenches from the late 1950's to the early 1970's. Investigation of the Site in 2004 was initiated by the New Jersey Department of Environmental Protection (NJDEP) after TCE was detected in nearby residential drinking water wells. On October 16, 2009, the NJDEP submitted a request to the United States Environmental Protection Agency (EPA) Emergency and Remedial Response Division (ERRD), to evaluate the Site for a Removal Action under the Comprehensive, Response, Compensation, and Liability Act of 1980, as amended (CERCLA). The EPA Removal Action Branch (RAB), Removal Assessment and Enforcement Section, performed a Removal Site Evaluation (RSE) and concluded a CERCLA Removal Action was warranted to address the threats posed by the former waste disposal areas (i.e., trenches) at the Site. In May 2011 the Site was listed on the National Priorities List (NPL). On September 29, 2011, an Action Memorandum was approved for the excavation and off-Site disposal of TCE contaminated soil at the Site.

From February 21 to May 30, 2012, the EPA-RAB completed the excavation and off-site disposal of the source areas of TCE contamination utilizing the services of the Emergency and Rapid Response Services (ERRS) contractor, United States Coast Guard (USCG) Strike Team, and the Removal Support Team 2 (RST 2) contractor at the Site from the waste trenches on site, identified as Dump Areas A, B, C, D, and E. Approximately 11,170 tons of non-hazardous waste, 224 tons of hazardous D040 waste meeting treatment, and 159 tons of hazardous D040 waste exceeding treatment according to the CERCLA was removed and transported to CERCLA off-site approved disposal facilities meeting Resource Recovery and Response Act (RCRA) guidelines. The excavation depths of Dump Areas A, B, D and E were taken to bedrock. Selected post confirmation soil sampling was performed from limited soil amounts in bedrock crevasses in Dump Areas A, B and D which indicated that the contaminated waste material was removed from these areas. Dump Area C was pre-delineated with a 50-foot grid taking 60 soil samples and the results indicated contamination was not present that required further action. In accordance with the Site-Specific Community Air Monitoring Plan (CAMP), RST 2 and the USCG performed on-site air monitoring and air sampling to ensure off-site migration of VOCs did not occur during excavation activities. After the completion of excavation activities the Site was re-graded and restored as close as possible to former conditions.

1.0 Introduction

This report summarizes the Removal Action conducted at the Mansfield Trail Dump Site (the Site) located in Stanhope, New Jersey from February 21 to May 30, 2012. The Site is the suspected source of volatile organic compound (VOC) contamination, specifically trichloroethene (TCE), that has migrated to the local groundwater aquifer and impacted neighboring drinking water sources. The United States Environmental Protection Agency Removal Action Branch (EPA-RAB) was tasked with the removal of this TCE source area utilizing the services of the Emergency and Rapid Response Services (ERRS) contract, United States Coast Guard (USCG) Strike Team, and the Removal Support Team 2 (RST 2) contract.

1.1 Site Location

The Site is located along an undeveloped wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed rail road overpass, in Stanhope, Sussex County, New Jersey. The Site is approximately 15.3 acres consisting of two parcels of undeveloped land (Block 365.06, lots 23 and 24) at latitude 40.9289443 and longitude -74.6995999. Five areas within the Site have been identified as areas of concern and are referred to as Dump Areas (i.e., trench areas) A, B, C, D, and E. Refer to Attachment A-1 Figure 1 - Site Location Map and Figure 2 - Site Overview Map.

The Site is bound to the north, south and west by upland woods, and by a former rail line to the east. The area around the Site is primarily residential. The nearest residences are located approximately 400 feet north-west of the Site from Dump Area A. Portions of Dump Areas B and C border a wetlands area in the southern end of the Site, which is seasonally flooded depending on precipitation levels. This area is fed by intermittent flow from the south and drainage from the ridge to the west from drainage culverts that lead to the former rail line ravine. A 500 kilovolt (kV) high tension transmission power line right-of-way passes through the middle of the Site in Dump Area D. An estimated 384 people reside within 0.5 miles of the Site and a high school is approximately 2,000 feet to the south of the Site.

1.2 Site History

The Site was used as a dump for septic wastes from the late 1950's to the early 1970's. Most of the waste disposal appears to have taken place in trenches. The New Jersey Department of Environmental Protection (NJDEP) submitted a request to the EPA Emergency and Remedial Response Division on October 16, 2009, to evaluate the Site for a Removal Action under the Comprehensive, Response, Compensation, and Liability Act of 1980 (CERCLA).

The EPA-RAB, Removal Assessment and Enforcement Section performed a Removal Site Evaluation (RSE) and concluded a CERCLA Removal Action was warranted to address the threats posed by the former waste disposal areas (i.e., trenches) at the Site. The contaminated waste and soil present within these areas is a continual source of VOC contamination. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into shallow aquifer at the Site above the Maximum Contaminant Levels (MCLs). The Comprehensive Environmental Responses, Compensation, and Liability Information System ID number is NJN000206345.

TCE contamination was first discovered in a home on Brookwood Road during a potable water test in 2004. The Sussex County Health Department and NJDEP subsequently sampled approximately 75 private wells in multiple

rounds. The testing revealed 18 wells along Brookwood and Ross Roads had TCE concentrations above the state drinking water standard. The highest concentration of TCE detected in a water sample was 110 parts per billion (ppb). As part of the investigation to identify the source of the contamination at Brookwood Road, the NJDEP discovered several potential dump areas on two vacant adjacent properties while reviewing historical aerial photography. The NJDEP identified and labeled four suspected dumping areas as Areas A through D. The NJDEP collected three soil samples at the Site, one each from Dump Areas A, B, and D in September 2009. A sludge-like material was encountered and elevated concentraions of TCE at 20,300 parts per million (ppm) and other VOCs, such as cis-1,2-dichloroethylene, 1,2-dichlorobenzene, toluene and chlorobenzene were identified with the highest concentrations detected in the upper trench of Dump Area A. It has been documented through on-site monitoring wells that the former disposal areas have impacted the groundwater at the Site. The CERCLA hazardous substances that have been detected in the monitoring wells at the Site were identified and are the same as those in the former waste disposal areas. The impacted bedrock aquifer beneath the Site supplies residential wells down-gradient of the Site. Analysis of groundwater samples first collected in 2004 from residential wells located approximately 400 feet from the Site has revealed that the closest down-gradient residential wells to the Site have been impacted by the migration of the same contaminants from the former waste disposal areas. In the beginning of 2005, the NJDEP funded and installed point-of-entry treatment systems (POETs) in 17 of the residences. Subsequent indoor air sampling also revealed TCE contamination in several homes from vapor intrusion. The NJDEP installed sub-slab depressurization systems (SDS) in five residences to address potential impact to indoor air. The NJDEP continues to perform operation and maintenance of the SDS systems and to monitor the drinking water and vapor in the area.

In 2010, EPA personnel and contractor representatives from the EPA Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). During May and June 2010, EPA collected soil and waste samples throughout the Site. The effort included the collection of nearly 100 samples at varying depths throughout the disposal areas of the Site, including within and around the trenches for purposes of horizontal delineation. The delineation boundary soils samples collected in Dump Area D during the May and June 2010 IA sampling events are referenced in Attachment B-1 - Figure 8 and Attachment B-2 - Tables 7 and 8, and were used during the 2012 Removal Action for the boundary limits of Dump Area D.

The results of sampling and analysis identified the presence of CERCLA hazardous substances, specifically TCE. A number of composite samples collected from within the trenches identified material which exceeded the Resource Conservation and Recovery Act (RCRA) Toxic Characteristic Leaching Procedure (TCLP) regulatory level for TCE of 500 micrograms per kilogram (µg/kg).

2.0 Removal Action Scope of Work

The objectives of the Removal Action at the Site were to prevent and/or minimize human exposure to contaminants in the areas of concern through contact with contaminated groundwater, soil and inhalation of VOC contaminants, and to prevent and/or minimize the migration of contaminants in surface soil, surface water and groundwater.

2.1 ERRS Scope of Work

The ERRS contractor completed the following activities in order to achieve the above stated Removal Action objectives for the Site: Established a support zone, contamination zone and exclusion zone; located all underground utilities; developed and finalized work and safety plans; obtained subcontractors to provide the

following: utility services, heavy equipment, transportation and disposal and laboratory services; restored the Site to original conditions; cleared the Site of extraneous debris and general site preparation; implemented access controls to prevent unauthorized access to the Site; installed a temporary access roads for access of heavy equipment to the excavation areas; prepared a soil staging area and the management of contaminated materials to prevent releases to the environment during excavation, stockpiling, handling and transportation of contaminated materials; collected samples for waste characterization; excavated Dump Areas A, B, C, D and E; transported waste off-site; and regarded and restored site landscape to conditions conducive to a wooded area.

2.2 USCG Scope of Work

USCG assisted RST 2 with the on-site air monitoring activities. Daily weather information obtained from the weather pack station deployed by the USCG on site was used to determine optimum monitoring locations. USCG remotely monitored AreaRAE® units from the site trailer and assisted with routine site walks for ERRS contractor health and safety during operations. The AreaRAE® units were used to monitor the following parameters: VOCs, hydrogen sulfide (H_2S), carbon monoxide (CO) in ppm and the lower explosive limits (LEL) and oxygen (O_2) in percent (%).

2.3 RST 2 Scope of Work

As part of the Removal Action, RST 2 completed the following tasks: documented on-site activities; conducted oversight of air monitoring activities by USCG; conducted oversight of ERRS waste characterization soil sampling and conducted pre-delineation and post confirmation soil sample and air sample collection and sample/data management.

3.0 Removal Action Phases

The following is an overview of the Removal Action Activities that occurred in each dump area of the Site from initiation to completion of site work. Attachment A provides further detail of site activities structured by day. Refer to Figures in Attachment A for Dump Area Locations Map and Excavation Boundaries Map. Refer to Attachment B for the photographic log sectioned by dump areas.

3.1 Pre-Excavation Phase

3.1.1 Vegetation and Debris Removal

Dump Area A: From February 21 to March 6, 2012, ERRS cleared and chipped vegetation and removed debris covering the area of excavation, as well as re-graded the slope from the upper trench to the lower trench of Dump Area A in order that the area could be excavated in a safe manner.

Dump Area B: From March 21 to 24, 2012, ERRS cleared and chipped wooded debris to prepare area for material excavation and removal.

Dump Area E: From February 15 to 22, 2012, ERRS cleared trees from Dump Area E. From March 5 to 7, 2012, ERRS graded and prepared Dump Area E for staging of hazardous and non-hazardous waste. Two silt fences were installed to prevent run off from excavated stock piled material.

Refer to the following Attachments: Attachment A, Removal Activities and Air Monitoring Report.

3.1.2 Waste Characterization Sampling

Dump Area A: On February 24, 2012, ERRS collected waste characterization samples. A total of four five-point composite samples were collected from the Lower Trench and three five-point composite samples were collected from the Upper Trench. On March 6, 2012, as directed by the EPA On-Scene Coordinator (OSC), ERRS flagged the Upper and Lower Trenches to designate the areas with hazardous and non-hazardous material based on the analytical results from the samples collected. All sample points were flagged and Global Positioning System (GPS) points taken.

Dump Area B: ERRS sampled Dump Area B on February 22, 2012. A total of three five-point composite samples were collected from the single trench in this area. The ERRS contractor collected the samples and RST 2 provided oversight. On March 6, 2012, as directed by the OSC, ERRS flagged the hazardous and non-hazardous material areas in Dump Area B based on the analytical results from the samples collected. All sample points were flagged and GPS points taken.

Dump Area C: ERRS sampled Dump Area C on February 22, 2012. One five-point composite sample was collected from this area. The ERRS contractor collected the samples and RST 2 provided oversight. All sample points were flagged and GPS points taken.

Dump Area D: ERRS sampled Dump Area D on March 2, 2012. A total of 20 five-point composite samples were collected from Trenches 1, 2, 3 and 4. The ERRS contractor excavated test pits and collected the samples and RST 2 provided oversight. Material in Trenches 1, 3 and 4 in Dump Area D contained non-hazardous material according to the analytical results. Trench 2 contained sulfide reactive material and was stockpiled and disposed in separate loads from the non-hazardous material. All sample points were flagged and GPS points taken.

Dump Area E: ERRS sampled Dump Area E on February 24, 2012. A total of nine five-point composite samples were collected from Trenches 1, 2, and 3. All sample points were flagged and GPS points taken. On March 6, 2012, as directed by the OSC, ERRS flagged the the northern and southern sections of Dump Area E to designate the areas with hazardous and non-hazardous material based on the analytical results from the samples collected.

Refer to the following Attachments:

Attachment A, Removal Activities and Air Monitoring Report

Attachment B, Pre-Delineation/Post-Confirmation/Waste Characterization Soil Sample Trip Report

Section 3: Waste Characterization Test Pit Sampling

Attachment B-1:

Figure 9: Waste Characterization Test Pit Locations

3.1.3 Pre-Delineation Sampling:

Dump Area C: From March 12 to 14, 2012, RST 2 collected a total of 59 discrete soil samples, including three field duplicates, from a 50 foot (ft) grid of Dump Area C to evaluate the area's removal eligibility and delineation of its excavation boundary. The analytical results for these soil samples were below the criteria contaminant concentrations listed on the NJDEP Site Remediation Soil Cleanup Standards for soils which have impact to groundwater. The OSC determined by the analytical results that Dump Area C did not contain soil

contaminants which warranted removal in this area. No further action was taken in this area of the Site. See Attachment B for the Soil Sampling Trip Report for more details.

Dump Area E: On March 29, 2012, RST 2 collected a total of 20 soil samples, including one field duplicate, from the perimeter boundary of Dump Area E as directed by the OSC to confirm the boundary of this area. All samples collected from the perimeter of Dump Area E were below action levels for the target compound, TCE, and did not warrant further excavation as directed by the OSC.

Refer to the following Attachments:

Attachment A, Removal Activities and Air Monitoring Report

Attachment B, Pre-Delineation/Post-Confirmation/Waste Characterization Soil Sample Trip Report

Section 1: Pre-Delineation Soil Sampling.

Attachment B-1:

Figure 4 - Dump Area C Pre-Delineation Sample Locations

Figure 5 - Dump Area E Pre-Delineation Sample Locations

3.2 Excavation Phase:

Dump Area A: On March 8, 2012, ERRS removed approximately 100 yards of hazardous material from the Upper Trench of Dump Area A and approximately 30 yards of hazardous material from the Lower Trench of Dump Area A. The designated hazardous material was stockpiled at the north section of Dump Area E. From March 12 to 14, 2012, ERRS removed approximately 150 yards of non-hazardous material from the Upper Trench of Dump Area A and approximately 80 yards of non-hazardous material from the Lower Trench of Dump Area A. The designated non-hazardous material was stockpiled at the south section of Dump Area E. All excavation was completed to bedrock.

Dump Area B: On March 7, 2012, a total of 80 yards of hazardous material was removed from Dump Area B and stockpiled in the north section of Dump Area E. After the removal of the hazardous material from the trench in Dump Area B, an earthen berm was created between the excavated area and the area containing the non-hazardous material. Between March 14 and 15, 2012, a sump was installed in the trench to de-water the remaining material. From March 21 to 23, 2012, approximately 100 yards of non-hazardous waste was removed from the trench and stockpiled in the south section of Dump Area E. On March 23, 2012, ERRS removed the earthen berm and completed removal from this area. All excavation was completed to bedrock.

Dump Area D: Trench 4 was excavated to bedrock from March 26 to 27, 2012. Trench 3 was excavated from March 28 to April 18, 2012. Trench 2 was excavated from April 21 to May 11, 2012. Trench 1 and lower Dump Area D, near roadway, was excavated from May 8 to 23, 2012. All material was stockpiled in the south section of Dump Area E. The excavator operator separated sulfide reactive containing non-hazardous material from non-sulfide reactive containing non-hazardous material based on previous sampling results.

Dump Area E: From March 8 to May 21, 2012, Dump Area E was used as a staging area for the hazardous and non-hazardous materials stockpiles. From May 16 to 21, 2012, ERRS excavated to bedrock (approximately two to three feet of material) where the non-hazardous material stockpile was located and excavated approximately 4 to 7 feet where the hazardous waste stockpile was located in Dump Area E.

Refer to the following Attachment: Attachment A, Removal Activities and Air Monitoring Report.

3.3 Load-Out Phase:

From March 22 to May 21, 2012, ERRS transported the following loads per day of non-hazardous and hazardous material off-site by American Waste Management Services, Inc. and Corbett Management.

Table 3-1: Non-hazardous Waste Materials Inventory

Waste Service Loads Tons per											
Company	Waste Type	Date	per day	day							
		3/22/12	9	203.84							
		3/23/12	15	347.85							
1		3/26/12	15	325.59							
	· · · · · · · · · · · · · · · · · · ·	3/27/12	14	330.16							
,	•	3/28/12	24	532.70							
American Waste	•	3/29/12	15	361.26							
Management Services,		3/30/12	25	580.74							
Inc.		4/02/12	24	559.42							
	•	4/03/12	20	458.06							
		4/04/12	2.5	592.87							
	Non-hazardous Soil and	4/09/12	15	349.28							
	debris	4/10/12	11	241.33							
		4/13/12	4	93.80							
	· .	5/07/12	30	683.64							
		5/08/12	38	917.56							
		5/09/12	37	883.17							
		5/10/12	37	869.98							
Corbett Management		5/14/12	33	808.76							
		5/16/12	21	478.46							
		5/17/12	39	976.77							
	· ·	5/18/12	23	555.21							
		5/21/12	1	20.47							
	Total	22 days	216	11,170.92							

Table 3-2: Hazardous Waste Materials Inventory

Waste Type	Date	Loads per day	Tons per day
Hazardous	5/04/12	7	171.09
Treatment	5/21/12	2	52.72
Total	2 days	9	223.81
Hazardous D040 Soil Exceeding Treatment	5/07/12	6	158.72
	Hazardous D040 Soil Meeting Treatment Total Hazardous D040 Soil Exceeding	Hazardous 5/04/12	Hazardous 5/04/12 7

3.4 Post-Excavation Phase:

3.4.1 Post-Confirmation Soil Sampling:

Dump Area A: On March 15 and 16, 2012, RST 2 collected a total of 13 soil samples, including one field duplicate, from the Lower Trench of Dump Area A perimeter and 28 soil samples, including one field duplicate, from the Upper Trench of Dump Area A perimeter for post excavation confirmation. In the Upper Trench of Dump Area A, the following sample was above the 1,000 μ g/kg action level for TCE: S-129-3033-001 (6,600 μ g/kg). The following samples were within 10% of the action limit and were also removed: S-131-2223-001 (190 μ g/kg) and S-132-4041-001 (250 μ g/kg). On April 19, 2012, the ERRS crew removed soil at these sample location points to bedrock. In the process of removing these sample points, a black waste material was discovered at the edge of the excavated area which was chased and excavated to bedrock.

Refer to the following Attachments:

Attachment B-1:

Figure 6 - Dump Area A Post-Confirmation Sample Locations Map for the re-excavated portion of the upper trench in Dump Area A.

Dump Area B: On March 27, 2012, RST 2 collected a total of 21 soil samples, including one field duplicate, from the trench in Dump Area B. The following sample locations were above the 1,000 μg/kg action level for TCE: S-136, S-142 and S-145. On April 25, 2012, ERRS removed additional soil around these sample locations to bedrock.

Dump Area D: On March 28, 2012, RST 2 collected a total of 11 soil samples, including one field duplicate, from Trench 4 of Dump Area D. All samples collected from Trench 4 were below the action levels and did not warrant further excavation as directed by the OSC. Post-confirmation soil samples were not able to be collected from Trench 1 through Trench 3. The excavation in these trenches were taken to bedrock, approximately 10 to 18 feet in depth, and extended in the area of excavation until virgin soil was reached at the perimeter. The delineation boundary soils samples collected in Dump Area D during the May and June 2010 IA sampling events are referenced in Attachment B-1, Figure 8, Dump Area D Post Confirmation Sampling and were used during the

2012 Removal Action for the boundary limits of Dump Area D.

Refer to the following Attachments:

Attachment B, Pre-Delineation/Post-Confirmation/Waste Characterization Soil Sample Trip Report Section 2: Post-Confirmation Soil Sampling

3.4.2 Backfilling and Grading:

Dump Area A: Backfilling and grading of Dump Area A occurred on April 20, 24 and 25, 2012. Clean material from the area was re-graded and the slope area leveled in the Upper Trench. The Lower Trench was regraded and on-site boulders were used to stabilize the slope area.

Dump Area B: From April 24 to 27, 2012, ERRS graded the Dump Area B and used clean excess soil from this area to backfill in Dump Area D and E.

Dump Area D: From May 22 to 25, 2012, ERRS backfilled with clean excess soil from Dump Area B and regraded the area for adequate drainage.

Dump Area E: May 17 and 18, 2012, ERRS backfilled and re-graded Dump Area E utilizing soil from Dump Area B.

3.4.3 Site Restoration:

From June to July 2012, ERRS contractors completed restoration activities in Dump Areas A, B, D and E.

Dump Area A: A stone barrier was built on the north-west boundary of the Lower Trench of Dump Area A. This area was graded to 35% slope and all large rocks, boulders and organic debris were removed from this area and used as backfill in Dump Area D in order to support site accessible for remediation activities. Hydroseeding was completed in this area for erosion prevention.

Dump Area B: Clean soil from the access road near the northern portion of Dump Area B that divides Dump Area B from Dump Area E was utilized in the re-grading of Dump Area E. Dump Area B was graded to Dump Area C level. Hydroseeding was completed in this area for erosion prevention.

Dump Area D: The end grade of Dump Area D was approximately a 30% to 40% slope. In Dump Area D, a drainage control basin was installed at the south east section near the road in order to also improve site drainage. Hydroseeding was completed in this area for erosion prevention.

Dump Area E: Due to very wet soil conditions from rain events following excavation activities, clean soil was used to stabilize soils for grading. Hydroseeding was completed in this area for erosion prevention.

Access Road: The widened truck access road that stretched from the support zone to Dump Area D and the extension between Dump Area E and Dump Areas B and C was removed and returned to the previous conditions of the trail. The access road built adjacent to the high tension power line right-of-way through Dump Area D remained for subsequent remediation activities and at the request of the power company. Hydroseeding was completed in this area for erosion prevention.

Support Zones: The Site trailers, storage units, dumpster and all rented equipment were demobilized from the Site.

Attachment A

Removal Activities and Air Monitoring Report

1.0 Introduction

During the United States Environmental Protection Agency's (EPA's) Removal Action at the Mansfield Trail Dump Site (the Site), the Emergency and Rapid Response Services (ERRS) contractor, United States Coast Guard (USCG) Strike Team and the Removal Support Team 2 (RST 2) contractor conducted the following removal activities summarized in this report from February 21 to May 30, 2012.

Refer to Attachment A-1 - Figure 1, for Site Location Map and Figure 2, for Site Overview Map and Attachment A-2, for site activity photographic log organized by dump area.

2.0 Removal Activities

2.1 Oversight and Air Monitoring Activities

As part of the Removal Action, RST 2 completed the following tasks: documented on-site activities; conducted oversight of air monitoring activities by USCG; conducted oversight of waste characterization soil sampling; pre-delineation and post confirmation soil sampling; air sample collection; and provided sample and data management.

USCG assisted RST 2 with on-site perimeter and work zone air monitoring activities for the purpose of monitoring volatile organic compounds (VOC) concentrations. Daily weather information obtained from the weather pack station deployed by the USCG onsite was used to determine optimum monitoring locations. The USCG remotely monitored AreaRAE® units from the site trailer and assisted with routine site walks for health and safety during site operations. The AreaRAE® units were used to monitor the following parameters: VOCs, hydrogen sulfide (H₂S), carbon monoxide (CO) in parts per million (ppm) and the lower explosive limits (LEL) and oxygen (O₂) in percent (%). See Section 3.0 for air monitoring results. Air monitoring was conducted daily unless otherwise stated in Section 2.2, Weekly Chronology of Removal Activities.

2.2 Weekly Chronology of Removal Activities

Week 1

<u>Tuesday</u>, <u>February 21, 2012</u>: ERRS cleared brush from Dump Area A. In addition, ERRS laid and rolled eight loads of stone to widen the trail that passes through Dump Area D and connects the main truck access road to Dump Area A at the top of the ridge (Area D access road).

Wednesday, February 22, 2012: ERRS continued to clear brush from Dump Area A and began brush clearing in Dump Area B. ERRS collected four 5-point composite soil samples from Dump Area B and one 5-point composite soil sample from Dump Area C. All samples were collected in Level C personal protective equipment.

Thursday, February 23, 2012: ERRS continued to clear brush from Dump Area A. An ERRS operator used a dozer and roller to grade and compact roadway with four loads of Class A, two inch stone along Area D access road. ERRS collected a total of nine five-point composite samples

in Dump Area E. RST 2 conducted oversight during ERRS sampling activities and documented site activities

Friday, February 24, 2012: ERRS cut and piled trees in Dump Area B and piled debris in Dump Area D. ERRS collected a total of seven, five-point composite samples in Dump Area A. Four of the samples were taken in the lower section and three samples were taken in the upper section.

Week 2

Monday, February 27 to Tuesday, February 28, 2012: ERRS continued to clear brush from Dump Area A. In addition, ERRS laid and rolled eight loads of stone for road widening in Dump Area D from access road to Dump Area A.

Wednesday, February 29, 2012: ERRS crew continued to clear brush from Dump Area A and completed brush clearing in Dump Area B.

Thursday, March 1, 2012: ERRS crew continued to clear brush from Dump Area A. An ERRS operator used a dozer and roller to grade and compact the Dump Area D access road with four dump truck loads of Class A two-inch clean stone.

<u>Friday, March 2, 2012</u>: ERRS collected a total of 20 five-point composite samples in Dump Area D. RST 2 conducted oversight during ERRS sampling activities and documented site activities.

Week 3

<u>Tuesday, March 6, 2012</u>: ERRS completed clearing and chipping in Dump Area A and flagged designated hazardous and non-hazardous areas in Dump Areas A, B, & E. RST 2 conducted oversight and documented site activities.

Wednesday, March 7, 2012: ERRS continued to clear trees in Dump Area E and segregated hazardous and non-hazardous from Dump Area B and staged in Dump Area E.

Thursday, March 8, 2012: ERRS removed hazardous material from the Lower Trench of Dump Area A to designated staging Dump Area E. RST 2 conducted oversight and documented site activities and assisted USCG with daily air monitoring deployment.

Friday, March 9, 2012: ERRS removed hazardous material from the Upper Trench of Dump Area A to designated staging Dump Area E. RST 2 conducted oversight, documented site activities, and assisted USCG with daily air monitoring deployment.

Week 4

Monday, March 12, 2012: In the morning ERRS performed dry decon on two excavators and the off road dump truck in order to begin excavation of non-hazardous material following the completion of excavation of hazardous material. ERRS excavated non-hazardous material from Dump Area A and staged material in Dump Area E. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area C. A total of 20 soil samples were collected and hand-delivered to EPA Division of Environmental Sience and Assessment (DESA) laboratory for VOC analysis. Refer to Attachment B, Section 1 for the Pre-Delineation Trip Report.

Tuesday, March 13, 2012: In the morning, ERRS removed 20 yards of non-hazardous material from the Lower Trench of Dump Area A and began removal of material in the Upper Trench of

Dump Area A. In the afternoon, ERRS removed 110 yards of non-hazardous material from the Upper Trench of Dump Area A. Crew prepared for sump pump installation, cleanup work area and secured silt fence around staging area in Dump Area E. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area C. A total of 20 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis. RST 2 collected three air samples from Dump Area A in the morning, two air samples from Dump Area A in the afternoon, and a field blank. Refer to Attachment C for Perimeter/Excavation Air Sampling Report.

Wednesday, March 14, 2012: ERRS completed excavation of the Upper and Lower Trench of Dump Area A in the morning. A load of Cement Kiln Dust was received and staged next to Dump Area B on the rear portion of the access path between Dump Areas B and E. In the afternoon, ERRS began installation of a sump in Dump Area B for the purposes of dewatering the material. Water treatment supplies were picked up by ERRS personnel. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area C. A total of 19 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis. RST 2 collected three air samples from Dump Area A in the morning, two air samples from Dump Area A in the afternoon, and a background sample near the site trailer.

Thursday, March 15, 2012: In the morning, ERRS completed the sump installation in Dump Area B, dug test pits in Dump Area D and installed two sumps in Dump Area D, Trench 4. ERRS received 25 tons of 2 ½ inch clean stone. In the afternoon, ERRS excavated in Dump Area D to install one sump. A delivery of 18 inch culvert pipe was received on site. ERRS personnel drilled holes in pipe for installation of sump. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area A. A total of 20 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis.

<u>Friday, March 16, 2012</u>: ERRS installed the two sumps into Dump Area D and operated sumps to extract water from trenches. ERRS covered Cement Kiln Dust for expected rain event. In the afternoon, ERRS crew began excavation of Trench 4, the upper trench in Dump Area D and removed four loads from this area and staged it in Dump Area E. RST 2 personnel conducted soil sampling in Dump Area A. A total of 21 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis.

Week 5

Monday, March 19, 2012: In the morning, ERRS completed excavation in the upper Trench 4 of Dump Area D, where six loads of material were removed to the staging area. In the afternoon, ERRS operator prepared middle trench for excavation, removed debris and graded area for access.

<u>Tuesday, March 20, 2012</u>: ERRS excavated non-hazardous material from the middle of Trenches 2 and 3 in Dump Area D, and 13 truckloads were transported to staging area.

Wednesday, March 21, 2012: ERRS excavated non-hazardous material from the middle of Trenches 2 and 3 in Dump Area D, and 15 truckloads were transported to staging area.

Thursday, March 22, 2012: ERRS excavated non-hazardous material from the trench in Dump Area B, where six truck loads were transported to staging area. Kiln dust was mixed with the material to bind the liquids. A total of nine trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs.

Friday, March 23, 2012: Non-hazardous material load out occurred from 0600 hrs to 1000 hrs where 15 dump trucks transported material off site to the designated landfill. ERRS continued the excavation of non-hazardous material from Dump Area B. Kiln dust was mixed with the material to bind the liquids. In the afternoon, ERRS excavated and transported five loads from Dump Area B and eight loads from Dump Area D to the stock pile in Dump Area E.

Week 6

Monday, March 26, 2012: A total of 15 trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs. A total of six loads were excavated from Dump Area B in the morning and 18 loads were excavated from the middle trenches of Dump Area D in the afternoon.

Tuesday, March 27, 2012: A total of 14 trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs. ERRS removed 18 loads of non-hazardous material from the middle trench of Dump Area D.

Wednesday, March 28, 2012: A total of 24 trucks transported non-hazardous material off site from 0630 hrs to 1015 hrs. ERRS removed 16 loads of non-hazardous material from the middle trench of Dump Area D. The stock pile was restacked for load out. All site work ceased from 1200 hrs to 1330 hrs due to a thunderstorm event.

Thursday, March 29, 2012: A total of 15 trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs. ERRS removed 16 loads of non-hazardous material from the middle trench of Dump Area D. The stock pile was restacked for load out. Two truckloads of Class A 2-inch stone were delivered to be utilized for road repair and backfill.

Friday, March 30, 2012: A total of 25 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 25 loads of non-hazardous material from the middle trench of Dump Area D. Two truckloads of Class A 2 ½ inch stone were delivered to be utilized for road repair and backfill.

Week 7

Monday, April 2, 2012: A total of 24 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 20 loads of non-hazardous material from the middle and lower trenches of Dump Area D.

<u>Tuesday, April 3, 2012</u>: A total of 20 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 25 loads of non-hazardous material from the middle and lower trenches of Dump Area D and stockpiled in staging area.

Wednesday, April 4, 2012: A total of 25 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 25 loads of non-hazardous material from the middle and lower trenches of Dump Area D. The stock pile was restacked for next days load out. ERRS secured the excavated area with high visibility fence, and filled in the deepest area of the excavation with 2-inch stone.

Week 8

Monday, April 9, 2012: A total of 15 trucks transported non-hazardous material off site from 0730 hrs to 0830 hrs. ERRS removed 18 loads of non-hazardous material from the middle and lower trenches of Dump Area D.

<u>Tuesday, April 10, 2012</u>: A total of 11 trucks of sulfide containing material and one truck of non-hazardous material were transported off site from 0630 hrs to 0830 hrs. ERRS removed 13 loads of non-hazardous and sulfide material from the middle and lower trenches of Dump Area D. Kiln dust was utilized to bind the water-containing material.

Wednesday, April 11, 2012: ERRS removed 19 loads of non-hazardous material from the lower trench of Dump Area D to stock pile in Dump Area E. Kiln dust was utilized to bind the water-containing material in the excavation area prior to transport to stock pile in Dump Area E.

Thursday, April 12, 2012: ERRS removed 20 loads of non-hazardous material from the lower trench of Dump Area D. A green material was discovered in Trench 2 of Dump Area D. This material was sampled by RST 2 due to the color difference (i.e., green color) of this material to the non-hazardous material sampled for waste characterization analysis prior to excavation and removal activities. RST 2 collected two samples of this material and was sent to the ERRS procured lab for waste characterization analyses. Refer to Attachment D, Section 2 for the sampling trip report for the green material.

<u>Friday, April 13, 2012</u>: A total of four truck loads of non-hazardous material were transported off site from 0630 hrs to 0700 hrs. ERRS removed 10 loads of non-hazardous material from the lower trench of Dump Area D to stock pile in Dump Area E. ERRS operator created a temporary stock pile located on the south end of the middle trench in Dump Area D in order to continue excavation.

Week 9

Monday, April 16, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled 13 loads into temporary stock pile located in Dump Area D, due to a full stock pile in Dump Area E. ERRS operator graded the area where the temporary stock pile was located and built out a dirt path for dump truck access.

Tuesday, April 17, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled eight loads into temporary stock pile located in Dump Area D.

Wednesday, April 18, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled 11 dump truck loads into temporary stock pile located in Dump Area D.

Thursday, April 19, 2012: ERRS excavated sample locations RST 2 personnel marked which exceeded the action level of 1 ppm for TCE in the upper trench of Dump Area A. While ERRS completed this task, additional black non-hazardous waste material was discovered. ERRS excavated material from Dump Area A and removed 12 loads to the temporary stock pile in Dump Area D.

Friday, April 20, 2012: ERRS backfilled the excavated area in Upper Trench of Dump Area A with the boulder stock pile in Dump Area D and excess soil from Dump Area A after slope regrading.

Week 10

Tuesday, April 24, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled 18 loads into temporary stock pile located in Dump Area D. ERRS prepared the Site for one week demobilization.

Wednesday, April 25, 2012: One load of 2 ½ inch Class A stone was delivered at 0900 hrs to build a road to the hazardous material stock pile area in Dump Area E. As directed by the OSC with oversight provided by RST 2, ERRS removed sample areas in Dump Area B which were above the action levels.

Week 11

Thursday, May 3, 2012: EPA OSC, RST 2, ERRS mobilized to the Site to continue Removal Action activities.

Friday, May 4, 2012: ERRS conducted site housekeeping, restack stock pile in Dump Area E and prepared for heavy volume of off loading activities for the following week.

Week 12

Monday, May 7, 2012: A total of 30 trucks of non-hazardous material were transported off site for disposal. ERRS removed 12 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

<u>Tuesday, May 8, 2012</u>: A total of 38 trucks of non-hazardous material were transported off site for disposal. ERRS removed 35 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

Wednesday, May 9, 2012: A total of 37 trucks of non-hazardous material were transported off site for disposal. ERRS removed 19 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

Thursday, May 10, 2012: A total of 37 trucks of non-hazardous material were transported off site for disposal. ERRS removed 21 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

Friday, May 11, 2012: ERRS excavated and removed 22 loads of non-hazardous material from Dump Area D to Dump Area E staging area.

Week 13

Monday, May 14, 2012: ERRS loaded out a total of 33 trucks of non-hazardous material were transported off site for disposal. ERRS removed 18 loads of non-hazardous material from Dump Area D stock pile to Dump Area E staging area. ERRS begins to backfill and re-grade Dump Area D with dozer with on-site soil collected from along the edges of the forest and re-sloping the area to minimize erosion and improve adequate drainage.

<u>Tuesday, May 15, 2012</u>: ERRS collected debris and trash from Dump Area A and swept the roadway for load out tomorrow. Rain limited site activity.

Wednesday, May 16, 2012: In the morning, a total of 11 trucks of non-hazardous material were transported off site for disposal. ERRS completed excavation of Dump Area D a total of 10 loads of non-hazardous material from Dump Area D stock pile to Dump Area E staging area. ERRS continues to re-grade Dump Area D and re-sloping the area to minimize erosion and improve adequate drainage.

Thursday, May 17, 2012: A total of 39 trucks of non-hazardous material were transported off-site for disposal. ERRS completed grading and backfilling of Dump Area D.

Friday, May 18, 2012: A total of 23 trucks of non-hazardous material were transported off site for disposal.

Week 14

Monday, May 21, 2012: One truck of non-hazardous material was transported off site for disposal. ERRS began removal of road leading to staging area and cleaned gravel road. RST 2 demobilizing equipment from the Site. Air monitoring not conducted.

Tuesday, May 22, 2012: ERRS decontaminated equipment, continued to clean roadway, and prepare supplies and equipment for demobilization. Air monitoring not conducted.

Wednesday, May 23, 2012: A total of six loads of top soil were delivered to the Site. Air monitoring not conducted.

Thursday, May 24, 2012: ERRS decontaminated excavator and off road dump truck. Air monitoring not conducted.

Friday, May 25, 2012: ERRS and RST 2 demobilized from the Site. Air monitoring not conducted.

3.0 Air Monitoring Section

Air monitoring activities were conducted in accordance with the procedures outlined within the USEPA guidance document entitled, "Superfund Program Representative Sampling Guidance, Volume 2: Air (Short-Term Monitoring), Interim Final. 1995. EPA 540/R-95/140. (OSWER Directive 9360.4-09, PB 96-963206)."

3.1 Air Monitoring Activities

Prior to removal activities, the USCG deployed a weather pack and performed a fresh air bump test for the AreaRAE® units. The USCG deployed AreaRAE® units in designated air monitoring stations. The parameters monitored were volatile VOCs, H₂S, CO in ppm and the LEL and O₂ in %. Any sustained high readings were noted in the daily summary. The USCG assisted RST 2 in performing health and safety monitoring of ERRS crew members in the field and monitored the AreaRAE® units remotely from the site trailer.

3.2 Air Monitoring Locations

Air stations were established along the periphery of the dump areas. RST 2 and USGC planned the day's air monitoring locations and reported the strategy to the OSC for approval. The USCG then deployed the AreaRAE® units in the selected air stations. The air stations located in Table 3.1 were used to mark the locations of the air monitoring units. (Refer to Figure 3. in Attachment A-1 for a map of the air monitoring locations)

Table 3-1: Air Station Locations

Air	Area	GPS I	ocation	Air	Area	GPS I	ocation
Station	Location	Lat	Long	Station	Location	Lat	Long
AA-001	Area A	40.928811398	-74.69939583	AA-011	Area D	40.928829154	-74.69849562
AA-002	Area A	40.928933946	-74.699735022	AA-012	Area E	40.9279432	-74.69870183
AA-003	Area A	40.928688507	-74.699791542	AA-013	Area B	40.92773744	-74.69910042
AA-004	Area D	40.92877892	-74.698195177	AA-014	Area B	40.927540333	-74.69900797
AA-005	Area D	40.92926838	-74.697875458	AA-015	Area C	40.92773320	-74.69870186
AA-006	Area D	40.929492812	-74.698092717	AA-016	Area D	40.929093864	-74.69802289
AA-007	Area D	40.92879148	-74.698617266	AA-017	Area D	40.928717804	-74.69836521
AA-008	Area D	40.92923201	-74.697636255	AA-018	Area D	40.929357089	-74.69768848
AA-009	Area E	40.927961174	-74.698284849	AA-019	Area D	40.929152213	-74.69808214
AA-010	Area D	40.92900101	-74.697704075	AA-020	Атеа Е	40.929522613	-74.69834424

3.3 Air Monitoring Action Levels

The AreaRAE® action levels and appropriate response procedures for perimeter air monitoring are specified in Table 3-2: Community Air Monitoring Action Levels for VOCs (Direct-Reading Instrumentation). The action level values were based on using one-half the value of the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) for TCE, which is 100 ppm (537 mg/m³). Table 3-2 located on the following page.

Table 3-2: Community Air Monitoring Action Levels for VOCs (Direct-Reading Instrumentation)

Parameter	Zone Location and Monitoring Interval	Action Levels (Above Background)	Response Activity				
	Perimeter zone continual and	< 25 ppm	Continue monitoring, continue normal wor activities				
VOCs (Total by Area RAE and PID)	periodic air monitoring during demolition, segregation, sampling	25-50 ppm	Cease work activities; take measures to suppress VOC emissions and contact the Site H&S Officer				
	and load-out activities.	>50 ppm	Cease work activities; contact the Site H&S Officer				

Air monitoring did not occur the last week on site since Removal Action activities were completed.

3.4 Air Monitoring Discussion

The overall air monitoring readings during Removal Action activities were within acceptable limits according to the Action Levels. The VOCs were consistently below 1 ppm for the daily average. The following days had short in duration spikes of VOCs above 25 ppm which were attributed to close proximity of excavator equipment or material sniff readings. On March 1, 2012, Unit 6, Area C, Station 15 was used for a sniff test of material by USCG. On March 21, 2012, Unit 2, Area D, Station 17, was attributed to close proximity of excavator during soil excavation in Trenches 2 and 3 and sniff testing of material. On March 22, 2012, Unit 3, Area E, Station 9 and on April 4, 2012, Unit 2, Area E, Station 9 was attributed to close proximity of excavator during stockpiling activities. None of the above readings exceeded 5 minutes at levels above 25 ppm.

3.5 Air Monitoring Summary Tables

The weekly air monitoring table includes the AreaRAE[®] units daily average and peak readings for VOC, H_2S , and CO parameters in ppm.

Table 3-3: Week 1 Air Monitoring Summary Table

Date	Area	Station	Area RAE	Monitoring	VOC	(ppm)	H2S (opm)	CO	pm)	Weather Condition
			Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Wedner Condition
	В	NA	1	0740 - 1537	0	0	0.0006	0.1	0.024	0.2	Wind Speed: 1.1
2-22	С	ŊÁ	3	0740 - 1537	0.00063	0.1	0	0	0.0033 6	0.1	Direction: NE Temperature: 51.3 F
	Е	NA	4	0758 - 1031	0	Ó	0	0	0	0	Humidity: 37%
,	E	NA	1	0757 = 1531	0	0	0.0081	1.7	0.0036	0.2	
2-23	Е	NA	2	0732 - 1531	0	0	0	0 -	0	. 0	Wind Speed: 1.8 Direction: E
2-23	E	NA	5 .	1224 - 1531	0.510	19.2	0.025	0.7	0.0022	0.3	Temperature: 54.5 F
	E	NA	6	0948 - 1323	0.02	0.3	0	0	0	0	Humidity: 34%
	A	1	1	0840 - 1418	0	0	0	0	0	0	Wind Speed: 4.5
2-24	A	3	2	0840 - 1417	0	0	0	0	0	0	Direction: W Temperature: 34.7 F Humidity: 98%
	Α	2	5	0933 - 1417	0.1891	4.9	0.0065	1.8	0.2855	1.6	

Notes: NA – not applicable. Air stations were not established at this time; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-4: Week 2 Air Monitoring Summary Table

Date	Area	Station	Area RAE	Monitoring	VOC (ppm)	CO (p	pm)	H2S (p	pm)	Wasak as Casa Pala
Duto	7 i i i	Biation	Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Weather Condition
2-29	С	15	1	0747 – 1343	` 0	0	0.0667	2	0	0	Wind Speed: 2.9 Direction: W
	Е	9	2	0747 – 1344	0.	0.	0	0	0	0	Temperature: 32.5 F Humidity: 96%
3-1	Е	12	,3	0734 – 1606	4.9566	24.6	1.1281	2.7	0.0016	0.1	Wind Speed: 1.0 Direction: W
	С	. 15	. 6	0734 – 1606	0.677	48.3	0.0063	3.2	0	0	Temperature: 35.5 I Humidity: 85%
3-2	D	11	1	0744 – 1546	0.0006	0.3	0.0857	0.9	0	0	Wind Speed 0.8 Direction: W
~ -	D	10	6	0744 – 1515	0	0	0	0	0	0	Temperature: 33.0 F Humidity: 80%

Notes: NA – not applicable. Air stations were not established at this time; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-5: Week 3 Air Monitoring Summary Table

Date	Area	Station	Area RAE	Monitoring	VOC	(ppm)	H2S (ppm)	CO(opm)	Weather Condition
			Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Weather Condition
3-6	A	1	1	0950 – 1715	0	0	0	0	0.0973	1.2	Wind Speed 0.9 Direction: E
3-0	A	3	4	0950 – 1643	0.4242	1.0	0.0087	0.1	0.0731	2.2	Temperature: 40.1 F Humidity:27%
	С	15	1	0745 – 1705	0	0	.0	0 .	0.0013	0.1	Wind Speed 1.1
3-7	E	12	2	0810 - 1030	0.0748	8.5	0	0	0	0	Direction: NE Temperature: 51.3 F
	E	9	4	0745 – 1649	0.0164	8.9	0	0	0.0002	0.1	Humidity: 37%
	Ą	1	1	1130 – 1445	0.02	0.3	0	0	0	0	
. '	A	3	6	0930 1700	0	0	0	0	0	0	Wind Speed 1.1
3-8	Е	9	2	0930 – 1700	0	0	. 0	-0	0	0	Direction: NE Temperature: 51.3 F
	E	12	3	0920 - 1700	0.1891	4.9	0.2855	1.6	0.0065	1.8	Humidity:37%
	MU	MU	4	0804 – 1615	0.0038	1.1	0	0	0	0	1

Notes: Mobile unit, VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Table 3-6: Week 4 Air Monitoring Summary Table

Date	Area	Station	Area RAE	Monitoring	voc		CO (p	opm)	H2S	ppm)	Weather Condition
		D.L.I.O.I.	Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	weather Condition
1	Е	. 9	1	1147 – 1652	0	0	0.0003	0.1	0	0	Wind Speed 1.6
3-12	A	1	2	1147 – 1554	0	0	0.249	0.5	0.027	0.5	Direction: E Temperature: 66,7 F
<u> </u>	Α	2	3	1147 – 1554	0.0036	0.3	0.195	1.8	0	0	Humidity: 23%
	A	3	1	0757 – 1535	0	0	0.001	0.2	0	0	
	A	1	2	0757 – 1534	0	0 .	0.322	2.9	0.303	2.9	Wind Speed 0.7
3-13	A	2	3	0757 – 1534	1.012	3.7	0.39	2.0	0	0	Direction: N Temperature: 70.9 F
	Е	9	4	0801 – 1534	0	0	0	0	0	0	Humidity: 48%
	MU	MU	6	0757 – 1534	0.167	1.7	0.137	1.3	0.029	0.1	
	A	2	1	0808 — 1540	0.038	0.4	1.353	3.2	0.128	0.3	
	A	1	2	0808 – 1429	0.002	0.2	0.578	2.7	0.066	0.3	Wind Speed 1.6
3-14	D	4	3	0808 – 1501	0.005	0.4	0.143	3.6	0.020	0.2	Direction: SE Temperature: 65.5 F
	D.	5	4	0808 - 1540	0.005	0.9	0.212	9	0.002	0.1	Humidity: 18%
	E	9	6	0811 1540	0.0002	0.1	0.465	6.2	0.100	0.2	
	D	. 6	1	0733 – 1438	0.202	0.7	0.334	2.4	0.027	0.3	
3-15	D	7	. 2	0734 – 1510	0	0	0.696	3.9	0.053	0.3	Wind Speed 2.9 Direction: E
	D	8	4	0733 - 1512	0	0	0.014	0.5	. 0	0	Temperature: 46.0 F
	Е	9	6	0733 – 1510	0	0	0.096	1.5	0.008	0.1	Humidity: 60%
	D	6	1	0740 – 1507	0.093	0.7	0.199	1.2	0	0	
3-16	D	7	3	0744 – 1507	2.149	6.4	0	0	0.0002	0.1	Wind Speed 0.2 Direction: ENE
	D	8	4	0739 1508	Ò	0	0.011	0.5	0	0	Temperature: 44.8 F
	E	9 .	6	0740 – 1425	1.559	6.6	0.041	1.3	0.0007	0.1	Humidity: 93%

Notes: Mobile unit; VOC – volatile organic compound; H_2S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-7: Week 5 Air Monitoring Summary Table

LAUIC	J-7.	WCCK 3	UTI TATA	omtoring Sum	mary ra	MIC			<u> </u>		
Date	Areä	Station	Area RAE	Monitoring	VOC	(ppm)	CO(F	pm)	H2S (ppm)	Weather Condition
Dute	1200	J	Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Wedner Condition
	D	18	2	1317 – 1517	. 0	. 0	0	0	0	0	Wind Speed 2.4
3-19	D	10	3	1317 – 1517	0	0	O_	0	0	0	Direction: NE Temperature: 73 F
	Е	9	6	1317 – 1517	0.023	0.9	0	0	0	0	Humidity: 40%
	E	. 9	2	0759 – 0825	0.115	1.1	1.423	16.6	0.104	1.0	
3-20	D	5	3	0759 – 0812	6.085	7.8	0.192	0.6	0.008	0.1	Wind Speed 1.3 Direction: N
3-20	D	8	4	0759 – 0812	0	0	0	0	0	0	Temperature: 71 F Humidity: 38%
	E	20	6	0759 - 0817	0.408	1.9	0	0	0.067	0.3	numuny: 30%
	D	7	1	0703 – 1518	0	0	0	0	0	0	
3-21	D	17	2	0703 – 1518	6.582	34.1	0.504	3.9	0.087	0.3	Wind Speed 1.0 Direction: SE
3-21	E	20	3	0703 – 1519	2.403	11.4	0.187	50.1	0.002	0,2	Temperature: 65 F Humidity: 42%
	E	12	4	0703 – 1518	0.039	0.5	0	0	0	0	Humany: 42%
	E	12	2	0602 - 1414	0	0	0.284	1.7	0.168	0.6	Wind Speed 2.9
3-22	E	9	3	0626 – 1413	3.068	31.7	0.101	1.4	0	Ó	Direction: N Temperature: 58 F
,	D	10	4	0703 – 1413	0.027	0.5	0	0	0	. 0	Humidity: 45%
	E	9	1	0556 – 1423	0.060	1.2	0.084	1.1	3.239	14.2	
2-23	Ď	18	2 ·	0556 - 1424	0.845	7.1	2.064	5.9	0.250	0.7	Wind Speed 0.5 Direction: E Temperature: 63 F Humidity: 32%
2-23	D	5	- 3	0556 - 1424	0.096	2.8*	0.004	0.5	0.001	0.1	
	D	10	4	0556 1424	0.0038	0.4	0.132	1.2	0.041	0.2	

Notes: Mobile unit; VOC - volatile organic compound; H2S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

* On February 23, 2012, at 09:18 area RAE unit 3 read at 299.3 ppm and was attributed as an error. Another area RAE was brought into the area

with no readings. The unit was reset with a fresh air bump calibration.

Table 3-8: Week 6 Air Monitoring Summary Table

I able	3-0.	WEEK O	AII M	onitoring Sum	mary 1a				_		
Date	Агеа	Station	Area RAE	Monitoring	voc	(ppm)	CO (r	opm)	H2S (ppm)	Weather Condition
			Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Weather Condition
	E	9.	1	1051 – 1413	0	0	1.423	2.9	1.941	5.3	Wind Speed 1.5
3-26	E	20	2	1051 – 1414	0	. 0	0.662	1.9	0.077	0.2	Direction: N
3-20	D	10	3	1051 – 1414	0.063	0.7	0	0	0.0004	0.1	Temperature: 63.2F
	D	18	4	1051 – 1413	0.001	0.2	0.092	0.8	0	0	Humidity: 45%
	Ē	9	1	0612 – 1438	0	0 /	0.320	1:9	1.258	6.8	Wind Count 2
3-27	Е	20	2	0612 – 1438	0.0130	0.5	0.375	2.1	0.001	0.4	Wind Speed 3 Direction: NE
ر يدر	D	. 11	3	0742 – 1354	0.053	0.7	0.291	1.4	0.0006	0.1	Temperature: 74 F
	D	8	4	0851 - 1439	0.101	0.6	0.088	0.7	0	0	Humidity: 50%
	D	21	1	0836 – 1515	0.024	0.6	0.074	1.0	4.064	8.2	W-10-107
	E	12	2	0625 – 1515	0.003	0.2	0.642	2.6	0.021	0.2	Wind Speed 0.7 Direction: N
3-28	D	19	4	0624 – 1515	0.198	0.8	0.188	1.1	0	. 0	Temperature: 72 F
	Е	9	6	0836 – 1515	0.029	2.3	0.220	3.1	0	0	Humidity: 43%
	D.	17	1	0720 – 1435	0.002	0.2	0.670	1.9	0.137	6.8	W-10116
3-29	Е	12	2	0608 – 1436	0.041	0.7	0.039	3.4	0.005	0.1	Wind Speed 1.5 Direction: S
3-27	D	10	4	0608 – 1436	0.486	1.2	0.003	0.4	0	0.	Temperature: 77.5 F
	E	20	6	0720 – 1436	0.619	5.4	0.507	2.9	0.002	0.1	Humidity: 28%
	D	17	1	0619 – 1557	0.159	5.1	0.069	1.5	0.011	0.1	W:-10-101
3-30	E	20	2	0619 – 1556	0.009	0.9	0.003	0.2	0.010	0.2	Temperature: 65 F
J-30	Е	12	4	0915 – 1557	0.053	0.6	0.001	0.2	0	0	
	D	7 :	6	0915 – 1557	0.208	2.9	0.399	2.9	0.0198	0.2	

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-9: Week 7 Air Monitoring Summary Table

Date	Area	Station	Area RAE	Monitoring	VOC	(ppm)	CO (I	opm)	H2S (ppm)	
			Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Weather Condition
	Ė	20	1	0958 – 1606	0.086	1.4	0.003	0.7	0	0	
4-2	Е	9	2	0958 – 1606	0.257	3.3	0.256	1.9 -	0.0002	0.1	Wind Speed 2.5 Direction: SE
1-2	D	10	4	0958 – 1606	0.813	17.7	0.032	0.8	0	0 ,	Temperature: 54.7 F
	D	16	6	0958 – 1606	0.823	5.0	0.620	5.4	0.033	0.3	Humidity: 25%
	E	12	1	0609 – 1614	0.019	1.6	0.684	1.9	0.019	0.2	****
4-3	E	.9	2	0609 – 1614	0.272	13.3	0.427	2.6	0	0	Wind Speed 1.6 Direction: SE
1 7-3	D	8	4	0722 - 1614	0.242	4.8	0.151	1.3	0.010	0.1	Temperature: 51.1 F
	D	11	6	0722 – 1614	1.320	6.0	0.687	3.3	0.007	0.1	Humidity: 19%
١,	E	12	1	0616 – 1342	0.030	1.2	0.733	1.9	0.010	0.2	
4-4	Е	9	2	0616 – 1342	1.346	29.4	0.259	2.6	0.005	0.1	Wind Speed 2.1 Direction: SE Temperature: 57.4 F Humidity: 28%
	С	11	4	0854 – 1329	0.010	0.5	0.009	0.4	0.002	0.1	
	Е	8	6	0854 – 1328	1.51	5.8	3.365	6.0	0.037	0.2	

Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Table 3-10: Week 8 Air Monitoring Summary Table

Date	Area	Station	Area RAE	Monitoring	VOC	(ppm)	CO(E	pm)	H2S	ppm)	Weather Condition
		24404	Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	weather Condition
-	Ė	9	_1	0929 - 1529	0.041	1.1	0.263	1.9	0	0	W-10-100
4-9	Е	12	2	0929 - 1529	0.049	0.6	0.628	2.2	0.199	0.4	Wind Speed 2.0 Direction: E
4-7	D	11	4	0929 – 1528	0.040	0.6	0.031	0.4	0	0	Temperature: 58.0 F
	D	8	6	0929 – 1529	0.272	4.6	0.282	2.0	0.003	0.1	Humidity: 17%
	D	MU	1	0720 - 1408	0.002	0.3	0.191	1.0	0	0	777. 10 104
4-10	D	19	2	0734 – 1409	0.007	0.7	1.004	4.4	0.123	0.5	Wind Speed 0.4 Direction: E
4-10	Е	15	4	0739 – 1408	0.002	0.7	0.0007	0.1	0	0	Temperature: 43.3 F
	E	20	-6	0729 1408	0.003	0.5	0.008	0.6	0	0	Humidity: 54%
	D	11	2	1518 – 1519	0	0	0	0	0.05	0.1	Wind Speed 1.6
4-11	E	12	4	1514 – 1519	Ö	Ó	0	0	0	0	Direction: É Temperature: 50.0 F
	E	20	6	1509 – 1519	0.118	0.7	0.009	0.1	0	0	Humidity: 34%
	D	17	2	1443 – 1453	0.0455	0.5	0	0	0	0	Wind Speed 1.9
4-12	E	12	4	1443 – 1453	2.364	14.1	0.072	0.4	0	0	Direction: SE
	D	11	6	1443 – 1453	2.545	11	0.172	0.8	0	0	Temperature: 55.8 F Humidity:40%
	D	MU	1	0715 ÷ 1417	0.0007	0.1	0.001	0.1	0	0	Nr. 10
4-13	D	11	2	0715 – 1416	0.033	0.4	0.909	3.0	0.175	0.5	Temperature: 57.0 F
-13	E	12	4	0715 - 1417	0.254	0.9	0.285	3.0	0.031	0.1	
	E	20	6	0715 – 1417	0.055	0.3	0.411	1.5	0.055	0.3	

Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Table 3-11: Week 9 Air Monitoring Summary Table

			Area	Monitoring St	VOC		CO (t	opm)	H2S (ppm)	
Date	Area	Station	RAE Unit	Monitoring Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Weather Condition
	D	17	1.	0949 – 1026	0.011	0.2	0.027	0.2	0	0	W-40
4-16	D	18	2	0953 – 1451	0.116	7.3	0.468	1.8	0.138	0.4	Wind Speed 1.1 Direction: N
4-10	E	12	4	0949 – 1451	0.009	0.4	0.764	1.7	0.056	0.2	Temperature: 86.0 F
	E	20	6	0958 1451	0.562	3.3	1.669	3.7	0.021	0.7	Humidity: 24%
	D	18	1	0707 – 1449	0.080	22.2	0.051	0.9	0.093	0.2	
	D	17	2	0707 – 0954	0.054	0.4	2.107	3.9	0.82	1.2	Wind Speed 1.3 Direction: SE Temperature: 69.8 F Humidity: 25%
4-17	D	17	. 3	0944 – 1035	0.0004	0.4	0.156	1.4	0	0	
	D	10	4	0707 – 1449	0.003	_/ 1.6	0.192	1.7	0.062	0.2	
	E	9	6	0707 – 1458	0.255	3.6	0.060	0.9	0.002	0.1	
	D	18	1	0717 – 1500	0.007	2.2	0.163	1.9	0.011	3.7	Wind Speed 0.9 Direction: SE Temperature: 53.2 F Humidity: 36%
4-18	D	11	4	0715 – 1500	0.074	4.5	0.007	4.5	0	0.1	
	D	[,] 10	6	0724 – 1500	0.536	13.7	0.339	7.8	0.001	0.6	
	D	10	1	0726 – 1502	0	0.5	0.158	1.3	0.060	0.3	Wind Speed 0.2 Direction: SE Temperature: 69.8 F Humidity: 24%
4-19	Α	3	4	0726 – 1331	0.033	4.6	0.053	1.3	0	0	
	E	20	6	0726 – 1504	0.021	5.3	0	0	1.080	1.2	
	D	11	1	0705 – 1250	0.005	0.4	0.100	1.6	0.130	0.3	Wind Speed 0.5 Direction: N Temperature: 68.0 F
4-20	Α	3	4	0705 - 1402	0.031	1.4	0.091	5.I	0.001	0.2	
	É	20	6	0705 – 1402	0.188	4.4	0.400	1.5	0.069	0.3	Humidity: 46%

Notes: Mobile unit, VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Table 3-12: Week 10 Air Monitoring Summary Table

Date	Area	Station	Area RAE	Monitoring	VOC	(ppm)	CO (p	pm)	H2S (ppm)_	n) Westles Contini	
		Diagon -	Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Weather Condition	
4-24	D	10	1	1019 – 1646	0.0001	0.2	0.162	1.2	0.002	0.1	Wind Speed 1.3 Direction: NW	
	E	9	4	1019 – 1646	0.018	1.0	0.053	1.2	0	0		
	С	15	5	1019 – 1646	0.002	0.4	0.037	1.2	0.001	0.2	Temperature: 64.2 F Humidity: 67%	
	E	9	1	0748 – 1159	0	0	0.0006	0.3	0	0	Wind Speed 1.3 Direction: NW Temperature: 64.2 F Humidity: 67%	
4-25,	E	12	4	0748 – 1159	0.137	0.8	0	0	0	0		
Notes: N	С	15	5	0748 – 1159	0	0	0	0	0.0008	0.1		

Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Table 3-13: Week 11 Air Monitoring Summary Table

Date	Area	··Station	Area RAE	Monitoring	<u> </u>		ppm)	Weather Condition			
		Juicon	Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	weather Condition
5-3	E	20	1	0938 – 1518	0	0	0.005	1.5	0.092	0.3	Wind Speed 1.3 Direction: E Temperature: 72 F Humidity:80%
	E	12	4	0938 – 1518	0.015	0.5	0.139	3.8	0.003	0.1	
	C	. 15	-5	0938 – 1518	0	0	0.888	4.9	0	0	
	E	20	1	0704 - 1418	0.003	0.4	0.810	2.7	0	0	Wind Speed 0.9 Direction: E Temperature: 61.5 F
5-4	Е	12	4	0704 – 1418	0.018	0.8	0.059	1.2	0.0007	0.1	
	С	15	5	0704 – 1418	0	0	1.325	4.4	0.033	0.3	Humidity: 86%

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-14: Week 12 Air Monitoring Summary Table

				Monitoring 50	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10010					
Date	Area	Station	Area RAE	Monitoring	voc	VOC (ppm)		CO (ppm)		ppm)	Weather Condition
			Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	· Peak	Weather Condition
	24	E	1	1247 – 1534	0.023	0.4	0.639	1.7	0.110	0.2	Wind Speed 1.9
5-7	9	E	4	1247 – 1534	0.094	1.1	0.228	1.7	0	0.1	Direction: NE Temperature: 64.5 F
	12	E	5	1247 – 1534	0.012	0.5	0.078	1.0	_ 0	0.1	Humidity: 83%
	24	Ē	1	1142 – 1429	0.033	1.6	0.005	0.9	0	0	Wind Speed 1.3
5-8	9	Ē	4	1142 – 1429	0.181	1.1	0.030	0.8	0	0	Direction: NW Temperature: 64.2 F Humidity: 67%
	15	Ė	5	1142 1429	0.030	0.3	0.688	2.0	0.034	0.1	
	24	E	1	0613 – 1532	0.105	4.6	0.734	4.4	0.74	0.3	Wind Speed 0.2 Direction: E Temperature: 72.0 F Humidity: 65%
5-9	9	E	4	0614 – 1532	0.065	1.1	0.0002	0.2	0.002	0.1	
	15	E	5	0613 – 1532	0.006	0.2	0.870	3.1	0.064	0.3	
	24	Е	1	0622 - 1531	0.061	5.2	0.873	2.5	0	0	Wind Speed 0.4
5-10	9	Е	4	0755 – 1531	0.017	1.2	0.0001	0.2	0.004	0.1	Direction: NNE
	15	E	5	0755 – 1531	0.001	0.1	0.383	1.8	0.010	0.2	Temperature: 58.1 F Humidity: 48%
	24	Е	1	0612 – 1428	0.111	12.6	0.330	2.1	0.043	0.5	Wind Speed 1.0 Direction: N
5-11	9	Е	4	0612 1428	0.315	12.2	0.143	2.0	0	0.3	
	15	E	5	0612 – 1428	0.016	1.2	0.559	2.8	0.39	1.2	Temperature: 71.8 F Humidity:62%

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-15: Week 13 Air Monitoring Summary Table

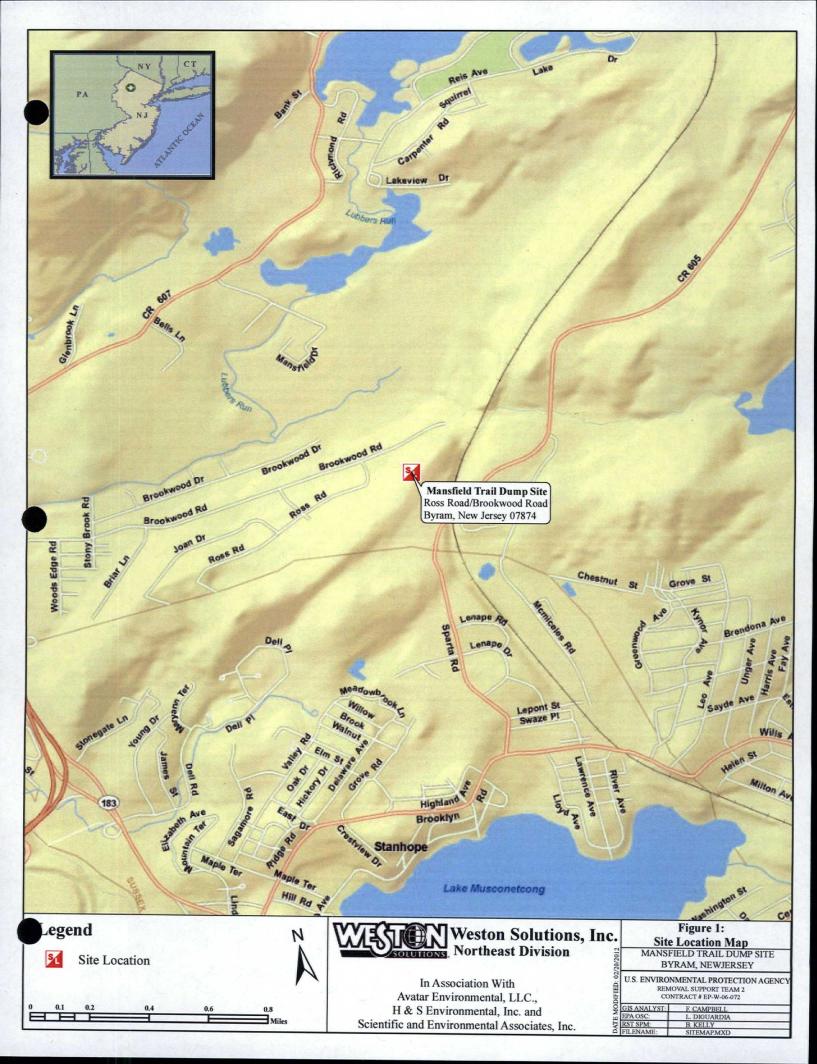
Date	Area	Station	Area RAE	Monitoring	VOC (ppm)		CO (ppm)		H2S (ppm)		Washan Caralisian
			Unit	Period	Avg.	Peak	Avg.	Peak	Avg.	Peak	Weather Condition
	20	Ē	1	1112 – 1418	0.221	23.1	0.322	2.0	0	0	Wind Speed 0.4
5-14	19	D	4	1132 – 1439	0.069	0.8	0.032	0.8	0.001	0.1	Direction: NE Temperature: 62.0 F Humidity: 80%
	8	Ď	5	1132 – 1439	0.0008	0.1	0.0004	0.1	0.381	1.8	
	20	E	1	0703 - 1453	0.018	1.8	0.058	0.3	0.068	0.7	Wind Speed 0.2 Direction: N Temperature: 73.0 F Humidity 69% Wind Speed 0.7 Direction: W Temperature: 69.0 F Humidity 27%
5-16	19	. D	4	0703 – 1453	0	0	0.003	0.1	0.015	0.8	
	8	D	5	0703 – 1453	0	0	0.193	3.8	0.032	0.3	
5-17	20	E	1	0652 – 1452	0	0	0	0	0	0	
	19	D	4	0652 - 1252	0.018	0.4	0	0	0	0	
	8	D	5	5 0652 – 1252 0	0	0	0	0	0.082	0.9	

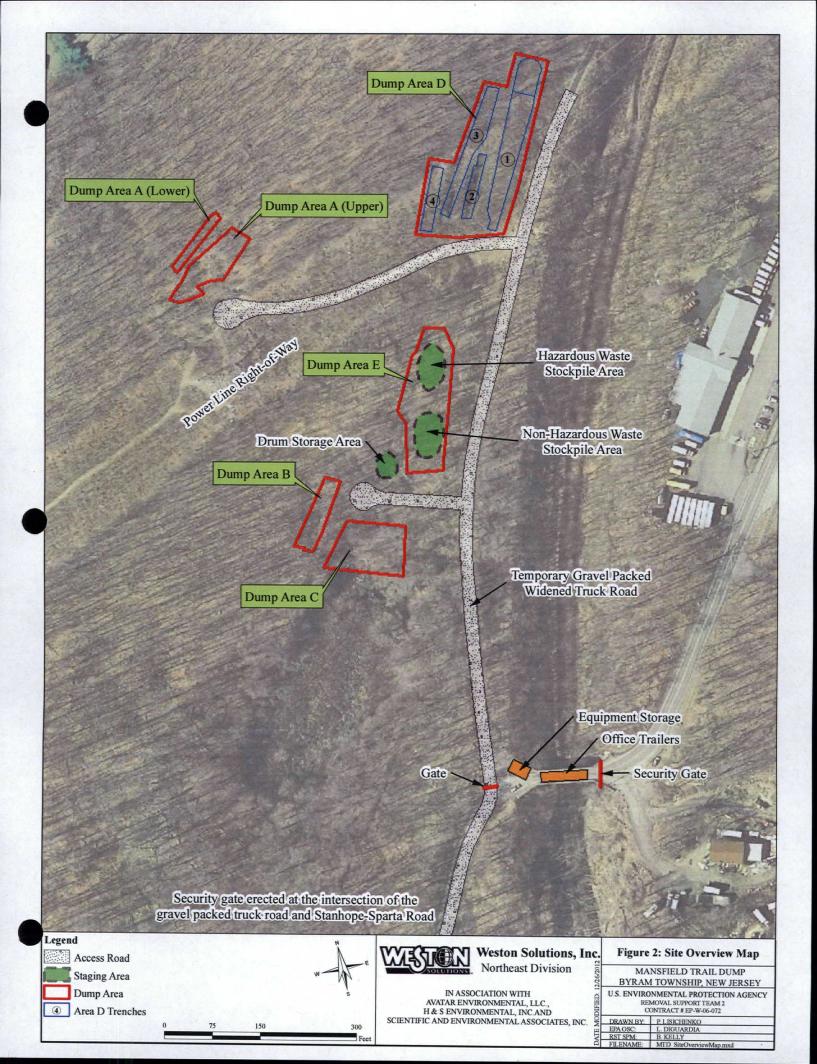
Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

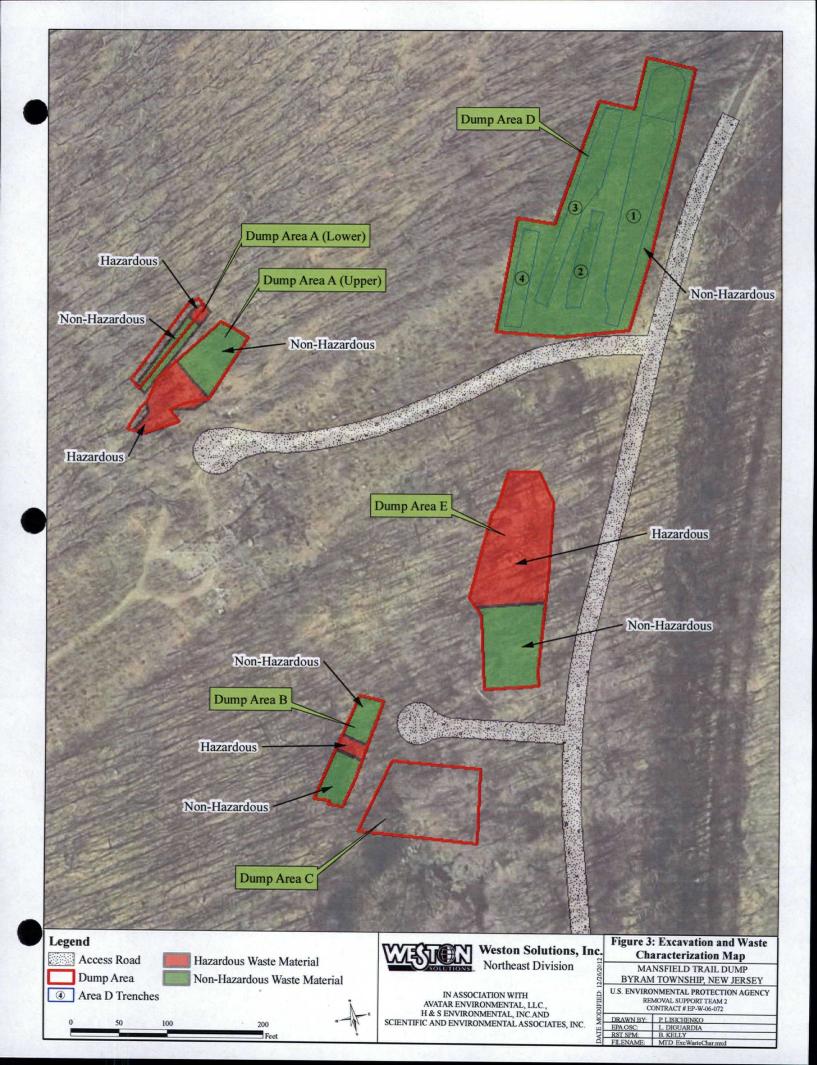
Attachment A-1:

Figures

Figure 1 – Site Location Map Figure 2 – Site Overview Map Figure 3 – Excavation Map







Attachment A-2:

Photo Documentation Log

Photographic Documentation Mansfield Trail Dump Site Dump Area A



Photograph 1: A view of Dump Area A, taken on 2/23/12 at 0850 hrs.



Photograph 2: A view of Dump Area A test pit sampling, taken on 2/24/12 at 1243 hrs.

Photographic Documentation Mansfield Trail Dump Site Dump Area A



Photograph 3: A general view of Dump Area A excavation activities in Lower Trench of facing South, taken on 3/12/12 at 1026 hrs.



Photograph 4: A general view of Dump Area A excavation activities between Upper and Lower Trench facing South, taken on 3/13/12 at 1010 hrs.

Dump Area A



Photograph 5: A general view of Dump Area A excavation activities in Lower Trench facing West, taken on 3/14/12 at 0908 hrs.



Photograph 6: A general view of Dump Area A excavation activities in Upper Trench facing North, taken on 3/20/12 at 1208 hrs.

Dump Area A



Photograph 7: A close view of Dump Area A Upper Trench facing North, taken on 3/20/12 at 1211 hrs.



Photograph 8: A general view of Dump Area A excavation activities in Upper Trench facing East, taken on 3/20/12 at 1210 hrs.



Photograph 9: A close view of Dump Area A Upper Trench facing South, taken on 3/20/12 at 1206 hrs.



Photograph 10: A North facing view Dump Area A Lower Trench, taken on 3/20/12 at 1209 hrs.



Photograph 11: A North facing view of Dump Area A Lower Trench, taken on 4/20/12 at 0800 hrs.



Photograph 12: A North facing view of Dump Area A Lower Trench, taken on 4/20/12 at 1209 hrs.



Photograph 13: A North facing view of Dump Area A Lower Trench, taken on 5/08/12 at 1209 hrs.



Photograph 14: A North facing view of Dump Area A Lower Trench, taken on 5/13/12 at 1209 hrs.



Photograph 1: A view of Dump Area B following the construction of an earthen berm road, taken on 2/15/12 at 1236 hrs.



Photograph 2: A view of Dump Area B prior to removal activities, taken on 2/16/12 at 1024 hrs.



Photograph 3: A view of Dump Area B, ERRS collecting soil samples, taken on 2/22/12 at 1433 hrs.



Photograph 4: A view of Dump Area B excavation activities for a dewatering retention basin facing South, taken on 3/07/12 at 1431 hrs.



Photograph 5: A view of Dump Area B excavation activities for a dewatering retention basin facing South, taken on 3/07/12 at 1431 hrs.



Photograph 6: A view of Dump Area B excavation activities for a dewatering retention basin facing South, taken on 3/07/12 at 1432 hrs.



Photograph 7: A view of Dump Area B facing North West, taken on 3/14/12 at 0906 hrs.



Photograph 8: A view of Dump Area B, sump pumping activities facing South, taken on 3/15/12 at 0859 hrs.



Photograph 9: A view of Dump Area B excavation of non –hazardous material with the addition of kiln dust for dewatering, taken on 3/22/12 at 0926 hrs.



Photograph 10: A view of Dump Area B excavation activities, taken on 3/22/12 at 1143 hrs.



Photograph 11: A view of Dump Area B removal of the road berm, taken on 3/23/12 at 1124 hrs.



Photograph 12: A general view of Dump Area B facing South, taken on 3/28/12 at 1305 hrs following post excavation soil sampling event.

Dump Area B



Photograph 13: A close view of Area B marked sample points in to be removed, taken on 4/18/12 at 1319 hrs.



Photograph 15: A view of the excavation in Dump Area B after sample locations that were above action levels were removed, taken on 5/14/12 at 1433 hrs.



Photograph 15: A view of Area B completed restoration including hydro seeding, taken on 7/13/12.



Photograph 1: A view of Dump Area C, ERRS collecting soil samples, taken on 2/22/12 at 1353 hrs.



Photograph 2: A view of Dump Area C, ERRS collecting soil samples, taken on 2/22/12 at 1407 hrs.



Photograph 3: A view of Dump Area C during RST 2 sampling event facing South, taken on 3/14/12 at 0900 hrs.



Photograph 4: A view of Dump Area C after ERRS cleared brush and hydro seeded disturbed area, taken on 7/13/12 at 1406 hrs.



Photograph 1: A view of Dump Area D prior to removal activities, taken on 2/17/12 at 0915 hrs.



Photograph 2: A view of Dump Area D, test pit sampling, taken on 3/2/12 at 1510 hrs.



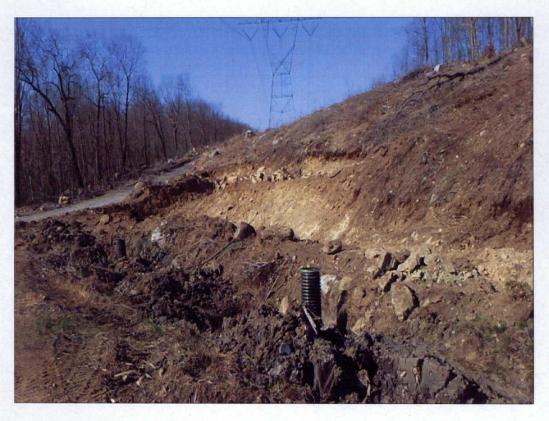
Photograph 3: An overview of Dump Area D facing Northwest prior to excavation activities, taken on 2/28/2012 at 1419 hrs.



Photograph 4: A view of Dump Area D Trench 4 excavated to bedrock, taken on 3/19/12 at 1223 hrs.



Photograph 5: A view of Dump Area D excavation of Trench 3, taken on 3/26/12 at 1001 hrs.



Photograph 6: A view of Dump Area D completed excavation of the South end of Trench 3 and the sumps in Trench 2, taken on 3/27/12 at 0947 hrs.

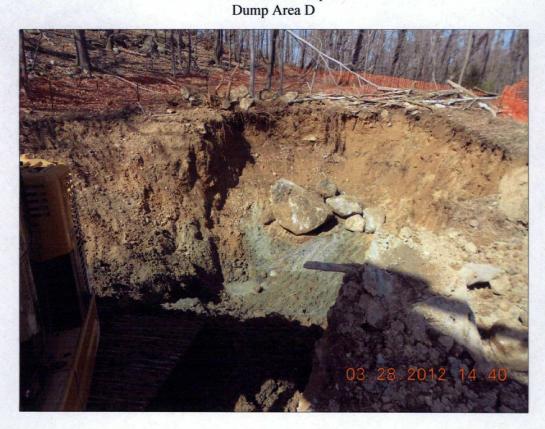
Dump Area D



Photograph 7: A view of Dump Area D excavation in the northern section of Trench 3, taken on 3/27/12 at 0952



Photograph 8: A view of Dump Area D excavation of the black material in the northern section of Trench 3, taken on 3/28/12 at 1137 hrs.



Photograph 9: A view of Dump Area D, taken by ERRS operator from excavator cab at the northern section of Trench 3 following the removal of the black material, taken on 3/28/12 at 1440 hrs.



Photograph 10: A view of Dump Area D, excavation material from Trench 3, taken on 4/3/12 at 1052 hrs.



Photograph 11: A view of Dump Area D, mixing kiln dust to bind material in Trench 2, taken on 4/10/12 at 1052 hrs.



Photograph 12: A distant view of Dump Area D and material excavation in Trench 2, taken on 4/11/12 at 0840 hrs.



Photograph 13: A close view of Dump Area D and material excavation in Trench 2, taken on 4/12/12 at 1051 hrs.



Photograph 14: A general view of Dump Area D excavation, taken on 4/20/12 at 1356 hrs.



Photograph 15: A general view of Dump Area D excavation, taken on 5/9/12 at 0948 hrs.



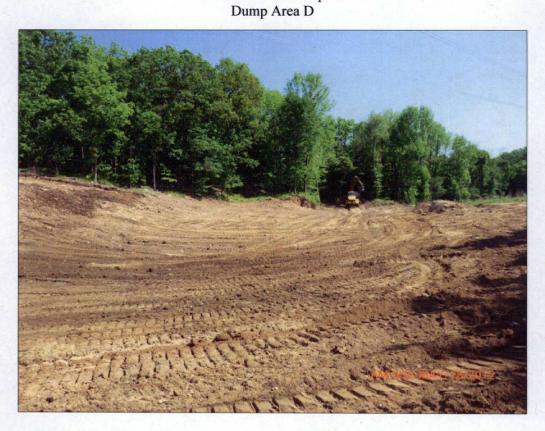
Photograph 16: A general view of Dump Area D backfilling and grading, taken on 5/11/12 at 1055 hrs.



Photograph 17: A general view of Dump Area D, backfilling and grading, taken on 5/14/12 at 0853 hrs.



Photograph 18: A general view of Dump Area D, backfilling and grading, taken on 5/17/12 at 1445 hrs.



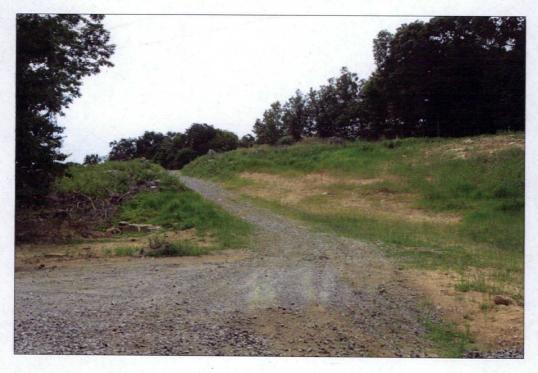
Photograph 19: A general view of Dump Area D grading, taken on 5/18/12 at 0952 hrs.



Photograph 20: A view of Dump Area D and completed removal activities, taken on 5/22/12 at 1250 hrs.



Photograph 21: A general view of Dump Area D, post restoration of facing North East taken on 7/13/12 at 1300.



Photograph 22: A general view of Dump Area D post restoration facing West, taken on 7/13/12 at 1310.



Photograph 23: A general view of Dump Area D post restoration facing North, taken on 7/13/12 at 1312.



Photograph 24: A general view of Dump Area D post restoration facing Northwest, taken on 7/13/12 at 1317.



Photograph 1: A view of Dump Area E prior to removal activities, taken on 2/17/12 at 0905 hrs.



Photograph 2: A view Dump Area E after grading and preparation for stock piles, taken on 3/8/12 at 1017 hrs.



Photograph 3: A view of Dump Area E hazardous stock pile in staging area, taken on 3/20/12 at 1216 hrs.



Photograph 4: A view of Dump Area E non-hazardous stock pile in staging area, taken on 4/3/12 at 1106 hrs.



Photograph 5: A view of Area E non-hazardous materials stock pile in staging area, taken on 4/16/12 at 1141 hrs.



Photograph 6: A view of Area E non-hazardous (rear) and hazardous (front) stock piles staging area, taken on 4/25/12 at 0817 hrs.



Photograph 7: A view of Dump Area E stock pile activities in staging area 3, taken on 5/9/12 at 0940 hrs.



Photograph 8: A view of Dump Area E after the hazardous pile and material were removed, taken on 5/10/12 at 1318 hrs.



Photograph 9: A view of Dump Area E after stock piles were removed, including the removal of 2 to 3 feet of material below the piles, taken on 5/17/12 at 1248 hrs.



Photograph 10: A view of Dump Area E backfilling, taken on 05/22/12 at 1247 hrs.



Photograph 11: A view of Dump Area E, backfilling and grading, taken on 5/22/12 at 1259 hrs.



Photograph 12: A view of Dump Area E after completed removal activities, taken on 5/24/12 at 0829 hrs.



Photograph 13: A view of Dump Area E, the northern portion, taken on 7/13/12 at 1329.



Photograph 14: A view of Dump Area E completed removal activities, taken on 7/13/12 at 1333.

Attachment B

Pre-Delineation, Post Confirmation, and Waste Characterization Soil Sampling Trip Report

Section 1 SAMPLING EVENT:

Pre-Delineation Soil Sampling Event - Dump Area C

SAMPLE DATES:

March 12 to 14, 2012

Section 2

SAMPLE EVENT:

Post-Confirmation Soil Sampling

SAMPLE DATES:

March 15 to 16 and 27 to 29, 2012

Section 3

SAMPLING EVENT:

SAMPLE DATE:

Waste Characterization Test Pit Sampling

February 22, 23, 27, March 2, April 12, 2012

SECTION 1 Pre-Delineation Soil Sampling

1.0 Removal Action Sampling Event Summary:

From March 12 to 14, 2012, as part U.S. Environmental Protection Agency (EPA) Removal Action, Weston Solutions, Inc., Removal Support Team 2 (RST 2) collected a total of 79 soil samples, including five field duplicates for target compounds list (TCL) volatile organic compounds (VOC) analysis from Dump Areas C and E. The contaminant of concern is trichloroethene (TCE) with a site action level of 1,000 micrograms per kilogram (µg/kg). Sample location methodology was determined by the EPA On-Scene Coordinator (OSC). Sampling activities were conducted in accordance with EPA Environmental Response Team (ERT) Standard Operating Procedure (SOP) #2001, 2006, and 2012. As specified in the site-specific health and safety plan, modified Level D personal protective equipment was worn during the sampling event and included Tyvek suit, latex boot covers, gloves, protective eyewear, hard hat, and high visibility safety vest.

2.0 Sample Collection Information:

Refer to the following figures and tables for the location and summary of samples collected by RST 2.

Attachment B-1:

- Figure 4 Dump Area C Pre-Delineation Sample Locations
 Attachment B-2:
 - Table 1a Pre-Delineation Sample Collection Summary

3.0 Sampling Methodology:

3.1 Dump Area C Sampling:

From March 12 to 14, 2012, RST 2 collected a total of 59 soil samples, including three field duplicates, from Dump Area C to determine the area's removal eligibility and delineation of its excavation boundary. A 100 foot by 60 foot dimension was selected in this area for a 10-foot by 10-foot grid pattern sample collection. There were seven columns and ten rows. The desired sample depth range was 2 to 24 inches below ground surface (bgs) with an average depth of 2 to 12 inches. In instances where refusal was encountered (i.e. rocks, roots, debris, etc.) samples were taken at the refusal depth. All soil samples from surface to reached depth were collected in aluminum pans prior to being transferred into four 5-gram Encore containers to be submitted to the laboratory for VOC analysis and one 8-oz glass jar to be submitted to the laboratory for soil moisture. A stainless steel shovel was utilized to reach appropriate depth. Enough shovels were available onsite to allow for one shovel per sample location, decontamination of these tools occurred once daily. One rinsate blank sample was collected per day from non-dedicated sampling equipment to ensure proper decontamination of hand tools.

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duffes
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample Collection, Sample Management, Site Health and Safety
Sean Hettinger	RST 2, Region II	Sample Collection

5.0 Laboratory Information:

	Sample Quantity	Analyses	Laboratory
Soil	59	TCL VOCs, DESA Method No. C-123	U.S. EPA, Region II - Division of Environmental Science and Assessment Laboratory
	59	Soil Moisture	2890 Woodbridge Ave. Edison, NJ 08837

EPA = U.S. Environmental Protection Agency

DESA = Division of Environmental Science and Assessment

6.0 Sample Dispatch Data:

On March 12, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA Division of Environmental Science and Assessment (DESA) laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031212-182347-0001.

On March 13, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031312-175357-0003.

On March 14, 2012, RST 2 hand-delivered the 19 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031412-165440-0004.

Refer to Attachment B-3 for a copy of the Chain of Custody Records.

7.0 Analytical Discussion:

7.1 Dump Area C:

The analytical results for the soil samples collected from Dump Area C from March 12 to 14, 2012 were below the criteria contaminant concentrations listed on the New Jersey Department of Environmental Protection (NJDEP) Site Remediation Soil Cleanup Standards for soils which have impact to ground water. The OSC determined by the analytical results that Dump Area C did not contain soil contaminants which warranted removal in this area. No further action will be taken in this area of the site.

Attachment B-2:

• Table 2 - Area C Analytical Summary Table

Attachment B-4:

• NJDEP Soil Cleanup Criteria

SECTION 2 Post-Confirmation Soil Sampling

1.0 Removal Action Sampling Event Summary:

From March 15 to 28, 2012, RST 2 collected a total of 93 soil samples, including five field duplicates, for TCL VOC analysis in Dump Areas A, B and D following excavation activities to confirm the complete removal of contaminated soils. The contaminant of concern is TCE with a site action level of 1,000 µg/kg. Dump Areas A, B and Trench 4 of Dump Area D were excavated by the Emergency Rapid Response Services (ERRS) Contractor to bedrock. All exposed rock was swept off with push brooms by ERRS personnel, and the excavated material was stockpiled in Dump Area E staging area for removal. The sample locations were determined by the EPA OSC. Sampling activities were conducted in accordance with EPA ERT SOP #2001, 2006, and 2012. As specified the site specific health and safety plan, modified Level D personal protective equipment was worn during the sampling event and included Tyvek suit, latex boot covers, gloves, protective eyewear, hard hat, and high visibility safety vest.

2.0 Sample Locations:

Refer to the following figures and tables for the location of the samples collected by RST 2.

Attachment B-1:

Figure 5 - Dump Area E Pre-Delineation Sample Locations

- Figure 6 Dump Area A Post-Confirmation Sample Location
- Figure 7 Dump Area B Post-Confirmation Sample Location
- Figure 8 Dump Area D Post-Confirmation Sample Location
 Attachment B-2
 - Table 1b Post-Confirmation Sample Collection Summary

3.0 Sampling Methodology

3.1 Dump Area A Sampling

On March 15 and 16, 2012, RST 2 collected a total of 13 soil samples, including one field duplicate, from the Lower Trench of Dump Area A, and 28 soil samples, including one field duplicate, from the Upper Trench of Dump Area A for Post Excavation Confirmation. In the Lower Trench, grab samples were taken approximately every 15 feet from the side walls and one row in the middle of trench from bedrock cracks. Dedicated sampling equipment was used for samples collected in Dump Area A on March 15, 2012, therefore a rinsate blank was not collected. Grab samples were collected and transferred directly into four 5-gram Encore containers and one 8-oz glass jar to be submitted to the laboratory for VOC and soil moisture analysis.

3.2 Dump Area B Sampling

On March 27, 2012, RST 2 collected a total of 21 soil samples, including one field duplicate, from the trench in Dump Area B. Samples were collected along two rows with sample points spaced approximately 12 feet apart with 10 sample locations in each row. Soil samples were collected from 1 to 3 inches bgs into aluminum pans in order to sift out rocks and debris prior to being transferred into four 5 gram Encore containers and one 8 oz glass jar to be submitted to the laboratory for VOC and soil moisture analysis.

3.3 Dump Area D Sampling

On March 28, 2012, RST 2 collected a total of 11 soil samples, including one field duplicate, from trench 4 of Dump Area D. Sample locations were spaced 10 feet apart along the excavated trench boundary and one row along the middle. Grab samples were collected and transferred directly into four 5-gram Encore containers and one 8-oz glass jar to be submitted to the laboratory for VOC and soil moisture analysis.

3.4 Dump Area E Sampling

On March 29, 2012, as directed by OSC, RST 2 collected a total of 20 soil samples, including one field duplicate, from the perimeter boundary of Dump Area E to re-confirm the boundary of this area to assure contamination from the stock piles located in this area did not affect areas past the double layered silt fence. A grab sample was collected every 15 feet on the outside of the silt fence near the stock pile at the south end of Dump Area E, and on the inside of the silt fence at the north end of the area. Dedicated sampling equipment was used for samples collected in Dump Area E, therefore a rinsate blank was not collected. Soil samples were collected from 1 to 3 inches bgs and transferred into aluminum pans in order to sift out rocks and debris. Soil samples for laboratory analysis were transferred into four 5-gram encore samples for VOC analysis and one 8-oz glass jar for soil moisture.

Refer to the following attachments for a complete summary of the analytical results and action levels. The criteria column for Soil with Impact to Groundwater was the designated cleanup standards for the site.

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duties -
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample Collection, Sample Management, Site Health and Safety
Sean Hettinger	RST 2, Region II	Sample Collection
Mark Conover	RST 2, Region II	Sample Collection

5.0 Laboratories Receiving Samples:

Sample Matrix		Analyses	Laboratory
Soil	113	TCL VOCs, DESA Method No. C-123	U.S. EPA, Region II - Division of Environmental Science and Assessment Laboratory
,	113	Soil Moisture	2890 Woodbridge Ave. Edison, NJ 08837

EPA = U.S. Environmental Protection Agency

DESA = Division of Environmental Science and Assessment

6.0 Sample Dispatch Data:

On March 15, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031512-154337-0006.

On March 16, 2012, RST 2 hand-delivered the 21 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031612-111345-0008.

On March 27, 2012, RST 2 hand-delivered the 21 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-032712-082946-0014.

On March 28, 2012, RST 2 hand-delivered the 11 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-032812-152855-0016.

On March 29, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-032912-134704-0018.

Refer to Attachment B-3 for a copy of the Chain of Custody Records.

7.0 Analytical Discussion:

7.1 Dump Area A:

In the Upper Trench of Dump Area A, the following sample was above the 1,000 micrograms per kilogram (µg/kg) Action Level for TCE: S-129-3033-001 (6,600 µg/kg). The following samples were within 10 percent of the action limit and were also removed: S-131-2223-001 (190 µg/kg), S-132-4041-001 (250 µg/kg). On April 19th, 2012, the ERRS crew removed soil at these sample location points to bedrock. In the process of removing these sample points, a black waste material was discovered at the edge of the excavated area. The ERRS crew increased the excavated area until bedrock was reached. OSC did not require RST 2 to resample this area since excavation was to bedrock.

Refer to Attachment B-1 - Figure 6 Dump Area A Post-Confirmation Sample Locations Map for the reexcavated portion of the upper trench in Dump Area A.

7.2 Dump Area B:

The following sample location contained an elevated concentration of 1,2-Dichlorobenzene: S-154 (6,900 $\mu g/kg$). On April 25, 2012, ERRS removed additional soil around this sample location to bedrock. The OSC did not require re-sampling since bedrock was reached.

7.3 Dump Area D:

All samples collected from Dump Area D, Trench 4 were below the Action Levels and did not warrant further excavation as specified by the OSC. Post-confirmation sampling could not be safely obtained in Trenches 1-3 due to over steepening of side walls (10 to 18 feet in height). The ERRS operator excavated to bedrock in depth and extended the width of the excavation until virgin soil was reach that contained neither black waste material nor debris. The May and June 2010 Integrated Assessment (IA) sampling events during the 2010 Removal Assessment was used for the delineation boundaries of Dump Area D. Refer to Attachment B-1 - Figure 8 and Attachment B-2 - Tables 7 and 8.

7.4 Dump Area E:

All samples collected from the perimeter of Dump Area E were below action levels for target compound, TCE and did not warrant further excavation as specified by the OSC.

Refer to the following attachments for a complete summary of the analytical results and action levels. The criteria column for soil with impact to groundwater was the designated cleanup standards for the site.

Attachment B-2:

- Table 3 Area E Analytical Summary Table
- Table 4 Dump Area A Analytical Summary Table
- Table 5 Dump Area B Analytical Summary Table
- Table 6 Dump Area D Trench 4 Analytical Summary Table

Attachment B-4:

• NJDEP Soil Cleanup Criteria

SECTION 3 Waste Characterization Test Pit Sampling

1.0 Removal Action Event Summary:

From February 22 to March 2, 2012, ERRS excavated 40 test pit locations in Dump Areas A, B, C, D and E and collected a total of 42 composite samples, including two field duplicate, to be analyzed for removal off-site. RST 2 conducted oversight of ERRS sampling event.

On April 12, 2012, RST 2 collected two soil samples from Trench 2 in Dump Area D for waste characterization analysis for the purpose of removal and disposal at a CERLCA compliant landfill. This material was sampled due to the obvious physical differences between the material currently being excavated, and the rest of the excavated material which was consistent with the soil sampled from the original test pits for waste characterization.

2.0 Sample Collection Information`

Attachment B-1:

- Figure 8 Dump Area D Post-Confirmation Soil Sample Location (for the location the two samples collected on April 12, 2012)
- Figure 9 Waste Characterization Test Pit Locations

Attachment B-2

• Table 1c - Waste Characterization Sample Collection Summary

3.0 Sampling Methodology

ERRS collected Waste Characterization Analysis Samples in Dump Area D, Trench 4 from excavated test pits. Due to the excavator operating under high tension power lines, the excavator was grounded with copper cables to a grounding rod. ERRS personal protective equipment (PPE) included: Tyvek suits, latex boot covers, protective eyewear, hard hat and respirator. ERRS crew collected samples from excavator bucket with a plastic scope and placed equal parts of soil into a 5-gallon bucket from the excavator bucket. Each test pit sampling location was comprised of five sub-locations each approximately two-feet apart from a center point. Sample depth was determined as the depth to ground water or depth to bedrock within the test pit.

The two samples collected by RST 2 on April 12, 2012, were grab samples from excavator bucket scoop taken from the bottom of the excavation pit at an approximate depth of 15 feet. The sample was collected using a dedicated plastic scoop. RST 2 personnel wore the following PPE while collecting samples: latex boot covers, safety glasses, hard hat, and high visibility safety vest.

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duties for Sampling Event
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample collection oversight
Joe Overend	ERRS, RM	Remedial Manager
Tom Williams	ERRS, RM	Remedial Manager
Technicians	ERRS	Sample collection

5.0 Laboratory Receiving Samples:

Sample Matrix	Sample Quantity	Analyses	Laboratory
Soil	42	Full TCLP (RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides), Ignitability, Corrosivity/pH, Reactive Cyanide/Sulfide TPH DRO, TPH GRO, Total (VOC, SVOC, RCRA 8 metals)	York Analytical Laboratories 120 Research Dr.
Soil	2	Full TCLP (RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides), Ignitability, Corrosivity/pH, Reactive Cyanide/Sulfide TPH DRO, TPH GRO,	Stratford, CT 06615

6.0 Sample Dispatch Data:

On February 28, 2012, a courier service picked up 22 soil samples to hand-deliver to York Analytical Laboratories in Stratford Connecticut under project ID MT2-42 and Purchase Order No. 8120. No Chain of Custody identification number available.

On March 6, 2012, a courier service picked up 20 soil samples to hand-deliver to York Analytical Laboratories in Stratford Connecticut under project ID MT2-42 and Purchase Order No. 8120. No Chain of Custody identification number available.

On April 13, 2012, custody of 2 soil samples were transferred from RST 2 to ERRS contractor (ER, LLC) to currier service to be hand-delivered to York Analytical Laboratories in Stratford Connecticut under project ID MT2-42 and Purchase Order No. 8120. No Chain of Custody identification number available.

Refer to Attachment B-3 for the Chain of Custody Records.

7.0 Analytical Discussion:

The EPA OSC used the analytical data from the soil samples collected from the test pits to determine the boundaries of hazardous material from non-hazardous material for the purpose of disposal in accordance with U.S. EPA RCRA criteria.

The analytical results for samples MTD-041212-AreaD-01 and MTD-041212-AreaD-02 characterize the waste as non-hazardous according to U.S. EPA RCRA criteria and consistent with previously analyzed material from Dump Area D collected on March 6, 2012.

Refer to the following attachments for additional information.

Attachment A-1: Figures

• Figure 3 – Excavation Map

Attachment B-1: Figures

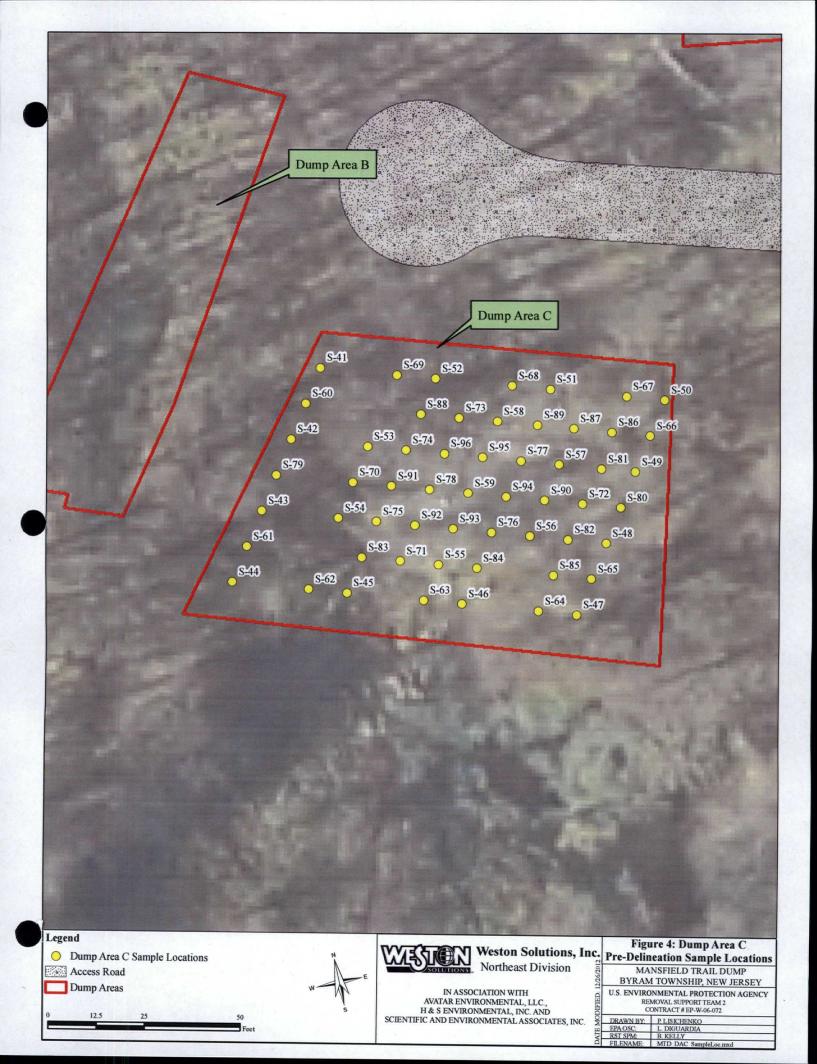
Figure 9 – Figure 9 Waste Characterization Test Pit Locations Map

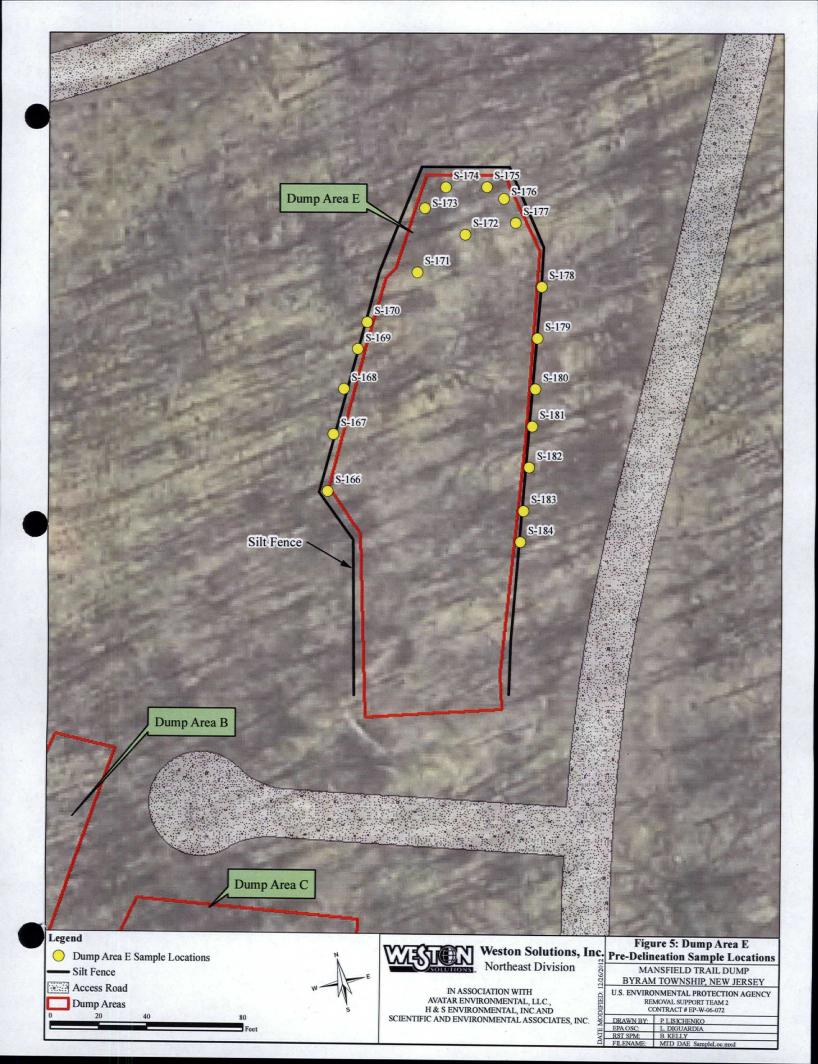
Attachment B-5: Laboratory Analytical Reports

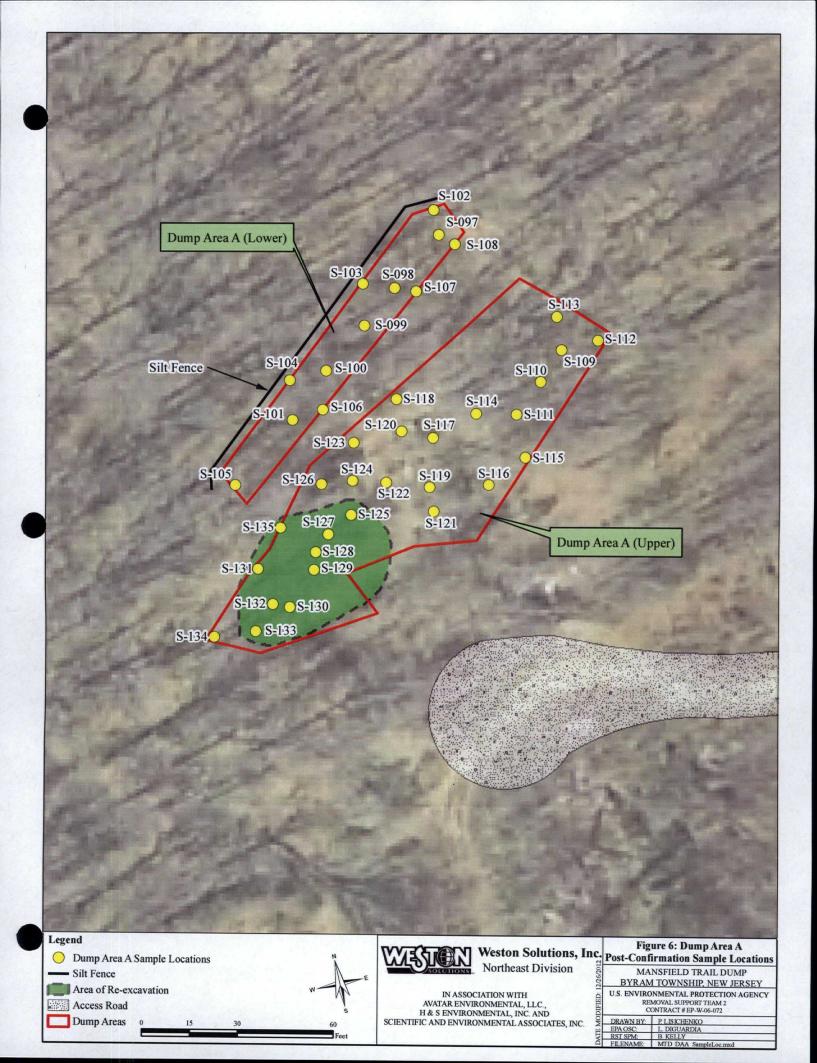
Attachment B-1:

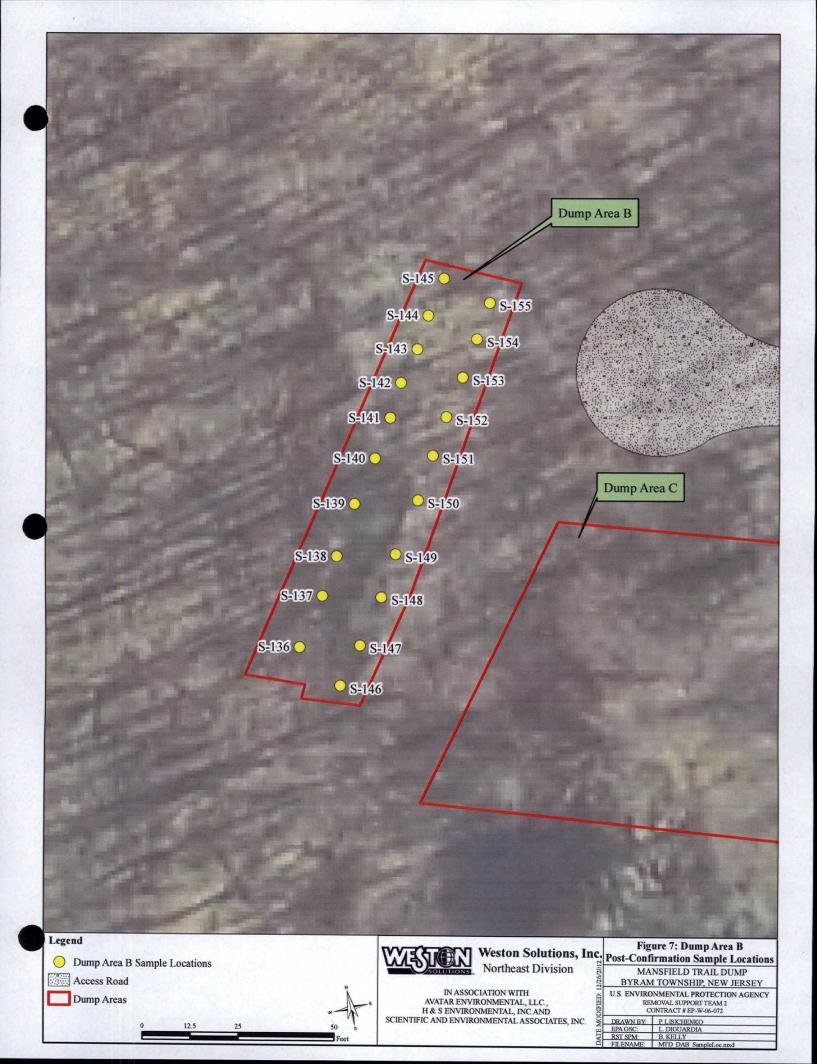
Figures

- Figure 4 Dump Area C Pre-Delineation Sample Locations
- Figure 5 Dump Area E Pre-Delineation Sample Locations
- Figure 6 Dump Area A Post-Confirmation Sample Locations
- Figure 7 Dump Area B Post-Confirmation Sample Locations
- Figure 8 Dump Area D Post-Confirmation Sample Locations
 - Figure 9 Waste Characterization Test Pit Locations

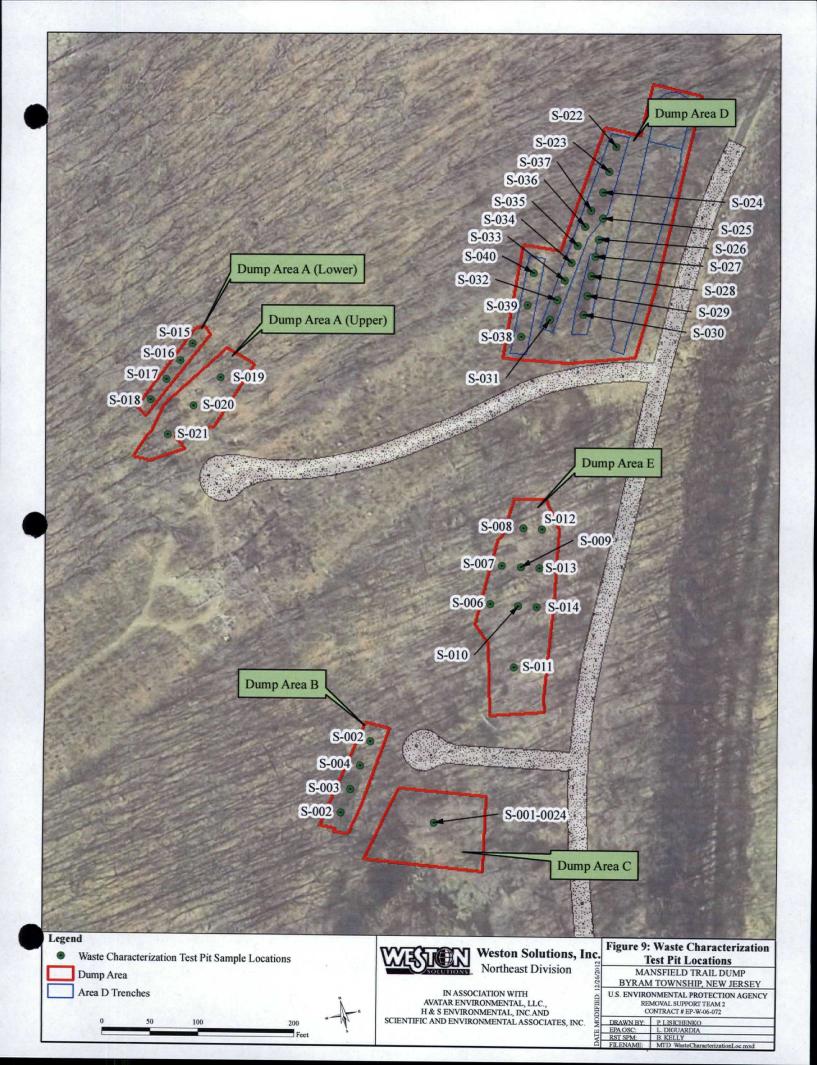












Attachment B-2:

Data Summary Tables

Table 1a – Pre-Delineation Soil Sample Collection Summary
Table 1b – Post-Confirmation Soil Sample Collection Summary

Table 1c - Waste Characterization Sample Collection Summary

Table 2 – Dump Area C Analytical Summary Table

Table 3 – Dump Area E Analytical Summary Table

Table 4 – Dump Area A Analytical Summary Table

Table 5 - Dump Area B Analytical Summary Table

Table 6 - Dump Area D Trench 4 Analytical Summary Table

Table 7 - Waste Characterization Analytical Summary Table

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collec-	Sample	Container	Analysis
							tion	Type	Type	
S-041-0210-001	S-041	Dump Area C	2 - 10	3/12/2012	13:30	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-041-0210-002	S-041	Dump Area C	2 - 10	3/12/2012	13:30	Soil	Grab	FD	Encore	TCL VOCs
S-042-0207-001	S-042	Dump Area C	2 - 7	3/12/2012	13:45	Soil	Grab	FS	Encore	TCL VOCs
S-043-0212-001	S-043	Dump Area C	2 - 12	3/12/2012	13:50	Soil	Grab	FS	Encore	TCL VOCs
S-044-0207-001	S-044	Dump Area C	2 - 7	3/12/2012	13:58	Soil	Grab	FS	Encore	TCL VOCs
S-045-0207-001	S-045	Dump Area C	2 - 7	3/12/2012	14:04	Soil	Grab	FS	Encore	TCL VOCs
S-046-0208-001	S-046	Dump Area C	2 - 8	3/12/2012	14:12	Soil	Grab	FS	Encore	TCL VOCs
S-047-0207-001	S-047	Dump Area C	2 - 7	3/12/2012	14:20	Soil	Grab	FS	Encore	TCL VOCs
S-048-0207-001	S-048	Dump Area C	2 - 7	3/12/2012	14:27	Soil	Grab	FS	Encore	TCL VOCs
S-049-0207-001	S-049	Dump Area C	2 - 7	3/12/2012	14:35	Soil	Grab	FS	Encore	TCL VOCs
S-050-0209-001	S-050	Dump Area C	2 - 9	3/12/2012	14:42	Soil	Grab	FS	Encore	TCL VOCs
S-051-0206-001	S-051	Dump Area C	2 - 6	3/12/2012	14:50	Soil	Grab	FS	Encore	TCL VOCs
S-052-0210-001	S-052	Dump Area C	2 - 10	3/12/2012	14:58	Soil	Grab	FS	Encore	TCL VOCs
S-053-0210-001	S-053	Dump Area C	2 - 10	3/12/2012	15:07	Soil	Grab	FS	Encore	TCL VOCs
S-054-0210-001	S-054	Dump Area C	2 - 10	3/12/2012	15:15	Soil	Grab	FS	Encore	TCL VOCs
S-055-0209-001	S-055	Dump Area C	2 - 9	3/12/2012	15:23	Soil	Grab	FS	Encore	TCL VOCs
S-056-0206-001	S-056	Dump Area C	2 - 6	3/12/2012	15:30	Soil	Grab	FS	Encore	TCL VOCs
S-057-0207-001	S-057	Dump Area C	2 - 7	3/12/2012	15:42	Soil	Grab	FS	Encore	TCL VOCs
S-058-0209-001	S-058	Dump Area C	2 - 9	3/12/2012	15:58	Soil	Grab	FS	Encore	TCL VOCs
S-059-0207-001	S-059	Dump Area C	2 - 7	3/12/2012	16:14	Soil	Gräb	FS	Encore	TCL VOCs
S-060-0206-001	S-060	Dump Area C	2 - 6	3/13/2012	12:55	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-060-0206-002	S-060	Dump Area C	2 - 6	3/13/2012	12:58	Soil	Grab	FD	Encore	TCL VOCs
S-061-0210-001	S-061	Dump Area C	2 - 10	3/13/2012	14:15	Soil	Grab	FS	Encore	TCL VOCs
S-062-0212-001	S-062	Dump Area C	2 - 12	3/13/2012	12:10	Soil	Grab	FS	Encore	TCL VOCs
S-063-0212-001	S-063	Dump Area C	2 - 12	3/13/2012	12:28	Soil	Grab	FS	Encore	TCL VOCs
S-064-0210-001	S-064	Dump Area C	2 - 10	3/13/2012	13:42	Soil	Grab	FS	Encore	TCL VOCs
S-065-0208-001	S-065	Dump Area C	2 - 8	3/13/2012	13:50	Soil	Grab	FS	Encore	TCL VOCs
S-066-0206-001	S-066	Dump Area C	2 - 6	3/13/2012	11:35	Soil	Grab	FS	Encore	TCL VOCs

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collec- tion	Sample Type	Container Type	Analysis
S-067-0206-001	S-067	Dump Area C	0 - 6	3/13/2012	11:25	Soil	Grab	FS	Encore	TCL VOCs
S-068-0208-001	S-068	Dump Area C	2 - 8	3/13/2012	11:48	Soil	Grab	FS	Encore	TCL VOCs
S-069-0212-001	S-069	Dump Area C	2 - 12	3/13/2012	12:40	Soil	Grab	FS	Encore	TCL VOCs
S-070-0206-001	S-070	Dump Area C	2 - 6	3/13/2012	14:35	Soil	Grab	FS	Encore	TCL VOCs
S-071-0210-001	S-071	Dump Area C	2 - 10	3/13/2012	14:30	Soil	Grab	FS	Encore	TCL VOCs
S-072-0208-001	S-072	Dump Area C	2 - 8	3/13/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-073-0104-001	S-073	Dump Area C	1 - 4	3/13/2012	12:30	Soil	Grab	- FS	Encore	TCL VOCs
S-074-0408-001	S-074	Dump Area C	4 - 8	3/13/2012	12:20	Soil	Grab	FS	Encore	TCL VOCs
S-075-0210-001	S-075	Dump Area C	2 - 10	3/13/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-076-0208-001	S-076	Dump Area C	2 - 8	3/13/2012	13:29	Soil	Grab	FS	Encore	TCL VOCs
S-077-0207-001	S-077	Dump Area C	2 - 7	3/13/2012	13:35	Soil	Grab	FS	Encore	TCL VOCs
S-078-0208-001	S-078	Dump Area C	2 - 8	3/13/2012	12:00	Soil	Grab	FS	Encore	TCL VOCs
S-079-0207-001	S-079	Dump Area C	2 - 7	3/14/2012	11:50	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-079-0207-002	S-079	Dump Area C	2 - 7	3/14/2012	11:50	Soil	Grab	FD	Encore	TCL VOCs
S-080-0212-001	S-080	Dump Area C	2 - 12	3/14/2012	9:15	Soil	Grab	FS	Encore	TCL VOCs
S-081-0208-001	S-081	Dump Area C	2 - 8	3/14/2012	10:47	Soil	Grab	FS	Encore	TCL VOCs
S-082-0212-001	S-082	Dump Area C	2 - 12	3/14/2012	9:20	Soil	Grab	FS	Encore	TCL VOCs
S-083-0210-001	S-083	Dump Area C	2 - 10	3/14/2012	12:08	Soil	Grab	FS	Encore	TCL VOCs
S-084-0211-001	S-084	Dump Area C	2 - 11	3/14/2012	10:33	Soil	Grab	FS	Encore	TCL VOCs
S-085-0206-001	S-085	Dump Area C	2 - 6	3/14/2012	10:25	Soil	Grab	FS	Encore	TCL VOCs
S-086-0408-001	S-086	Dump Area C	4 - 8	3/14/2012	10:10	Soil	Grab	FS	Encore	TCL VOCs
S-087-0207-001	S-087	Dump Area C	2 - 7	3/14/2012	10:00	Soil	Grab	FS	Encore	TCL VOCs
S-088-0208-001	S-088	Dump Area C	2 - 8	3/14/2012	11:28	Soil	Grab	FS	Encore	TCL VOCs
S-089-0206-001	S-089	Dump Area C	2 - 6	3/14/2012	9:05	Soil	Grab	FS	Encore	TCL VOCs
S-090-0212-001	S-090	Dump Area C	2 - 12	3/14/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-091-0207-001	S-091	Dump Area C	2 - 7	3/14/2012	11:16	Soil	Grab	FS	Encore	TCL VOCs
S-092-0212-001	S-092	Dump Area C	2 - 12	3/14/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs
S-093-0210-001	S-093	Dump Area C	2 - 10	3/14/2012	10:38	Soil	Grab	FS	Encore	TCL VOCs

Table 1a. Pre-Delineation Soil Sample Collection Summary

Mansfield Trail Dump Site March 12 to 29, 2012

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collec- tion	Sample Type	Container Type	Analysis
·S-094-0210-001	S-094	Dump Area C	2 - 10	3/14/2012	10:55	Soil	Grab	FS	Encore	TCL VOCs
S-095-0208-001	S-095	Dump Area C	2 - 8	3/14/2012	10:47	Soil	Grab	FS	Encore	TCL VOCs
S-096-1220-001	S-096	Dump Area C	12 - 20	3/14/2012	11:10	Soil	Grab	FS	Encore	TCL VOCs
S-166-0103-001	S-166	Dump Area E Perimeter	1 - 3	3/29/2012	12:45	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-166-0103-002	S-166	Dump Area E Perimeter	1 - 3	3/29/2012	12:45	Soil	Grab	FD	Encore	TCL VOCs
S-167-0103-001	S-167	Dump Area E Perimeter	1 - 3	3/29/2012	12:55	Soil	Grab	FS	Encore	TCL VOCs
S-168-0103-001	S-168	Dump Area E Perimeter	1 - 3	3/29/2012	13:00	Soil	Grab	FS	Encore	TCL VOCs
S-169-0103-001	S-169	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	FS	Encore	TCL VOCs
S-170-0103-001	S-170	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-171-0103-001	S-171	Dump Area E Perimeter	1 - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-172-0103-001	S-172	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-173-0103-001	S-173	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-174-0103-001	S-174	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-175-0103-001	S-175	Dump Area E Perimeter	1 - 3	3/29/2012	12:55	Soil	Grab	FS	Encore	TCL VOCs
S-176-0103-001	S-176	Dump Area E Perimeter	1 - 3	3/29/2012	13:00	Soil	Grab	FS	Encore	TCL VOCs
S-177-0103-001	S-177	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	·FS	Encore	TCL VOCs
S-178-0103-001	S-178	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-179-0103-001	S-179	Dump Area E Perimeter	1 - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-180-0103-001	S-180	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-181-0103-001	S-181	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-182-0103-001	S-182	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-183-0103-001	S-183	Dump Area E Perimeter	1 - 3	3/29/2012	13:35	Soil	Grab	FS	Encore	TCL VOCs
S-184-0103-001	S-184	Dump Area E Perimeter	1 - 3	3/29/2012	13:40	Soil	Grab	FS	Encore	TCL VOCs

Notes:

MS/MSD = Matric Spike/Matric Spike Duplicate

FS = Field Sample

TCL = Target Compound List

Table 1a.

Pre-Delineation Soil Sample Collection Summary

Mansfield Trail Dump Site March 12 to 29, 2012

FD = Field Duplicate

VOC = Volatile Organic Compounds

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Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collec- tion	Sample Type	Container Type	¹ Analysis
S-041-0210-001	S-041	Dump Area C	2 - 10	3/12/2012	13:30	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-041-0210-002	S-041	Dump Area C	2 - 10	3/12/2012	13:30	Soil	Grab	FD	Encore	TCL VOCs
S-042-0207-001	S-042	Dump Area C	2 - 7	3/12/2012	13:45	Soil	Grab	FS	Encore	TCL VOCs
S-043-0212-001	S-043	Dump Area C	2 - 12	3/12/2012	13:50	Soil	Grab	FS	Encore	TCL VOCs
S-044-0207-001	S-044	Dump Area C	2 - 7	3/12/2012	13:58	Soil	Grab	FS	Encore	TCL VOCs
S-045-0207-001	S-045	Dump Area C	2 - 7	3/12/2012	14:04	Soil	Grab	FS	Encore	TCL VOCs
S-046-0208-001	S-046	Dump Area C	2 - 8	3/12/2012	14:12	Soil	Grab	FS	Encore	TCL VOCs
S-047-0207-001	S-047	Dump Area C	2 - 7	3/12/2012	14:20	Soil	Grab	FS	Encore	TCL VOCs
S-048-0207-001	S-048	Dump Area C	2 - 7	3/12/2012	14:27	Soil	Grab	FS	Encore	TCL VOCs
S-049-0207-001	S-049	Dump Area C	2 - 7	3/12/2012	14:35	Soil	Grab	FS	Encore	TCL VOCs
S-050-0209-001	S-050	Dump Area C	2 - 9	3/12/2012	14:42	Soil	Grab	FS	Encore	TCL VOCs
S-051-0206-001	S-051	Dump Area C	2 - 6	3/12/2012	14:50	Soil	Grab	FS	Encore	TCL VOCs
S-052-0210-001	S-052	Dump Area C	2 - 10	3/12/2012	14:58	Soil	Grab	FS	Encore	TCL VOCs
S-053-0210-001	S-053	Dump Area C	2 - 10	3/12/2012	15:07	Soil	Grab	FS	Encore	TCL VOCs
S-054-0210-001	S-054	Dump Area C	2 - 10	3/12/2012	15:15	Soil	Grab	FS	Encore	TCL VOCs
S-055-0209-001	S-055	Dump Area C	2-9	3/12/2012	15:23	Soil	Grab	FS	Encore	TCL VOCs
S-056-0206-001	S-056	Dump Area C	2 - 6	3/12/2012	15:30	Soil	Grab	FS	Encore	TCL VOCs
S-057-0207-001	S-057	Dump Area C	2 - 7	3/12/2012	15:42	Soil	Grab	FS	Encore	TCL VOCs
S-058-0209-001	S-058	Dump Area C	2 - 9	3/12/2012	15:58	Soil	Grab	FS	Encore	TCL VOCs
S-059-0207-001	S-059	Dump Area C	2 - 7	3/12/2012	16:14	Soil	Grab	FS	Encore	TCL VOCs
S-060-0206-001	S-060	Dump Area C	2 - 6	3/13/2012	12:55	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-060-0206-002	S-060	Dump Area C	2 - 6	3/13/2012	12:58	Soil	Grab	FD .	Encore	TCL VOCs
S-061-0210-001	S-061	Dump Area C	2 - 10) 3/13/2012	14:15	Soil	Grab	FS	Encore	TCL VOCs
S-062-0212-001	S-062	Dump Area C	2 - 12	3/13/2012	12:10	Soil	Grab	FS	Encore	TCL VOCs
S-063-0212-001	S-063	Dump Area C	2 - 12	3/13/2012	12:28	Soil	Grab	FS	Encore	TCL VOCs
S-064-0210-001	S-064	Dump Area C	2 - 10	3/13/2012	13:42	Soil	Grab	FS	Encore	TCL VOCs
S-065-0208-001	S-065	Dump Area C	2 - 8	3/13/2012	13:50	Soil	Grab	FS	Encore	TCL VOCs
S-066-0206-001	S-066	Dump Area C	2 - 6	3/13/2012	11:35	Soil	Grab	FS	Encore	TCL VOCs

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collec- tion	Sample Type	Container	Analysis
S-067-0206-001	S-067	Dump Area C	0:- 6	3/13/2012	11:25	Soil	Grab	FS	Encore	TCL VOCs
S-068-0208-001	S-068	Dump Area C	2 - 8	3/13/2012	11:48	Soil	Grab	FS	Encore	TCL VOCs
S-069-0212-001	S-069	Dump Area C	2 - 12	3/13/2012	12:40	Soil	Grab	FS	Encore	TCL VOCs
S-070-0206-001	S-070	Dump Area C	2-6	3/13/2012	14:35	Soil	Grab	FS	Encore	TCL VOCs
S-071-0210-001	S-071	Dump Area C	2 - 10	3/13/2012	14:30	Soil	Grab	FS	Encore	TCL VOCs
S-072-0208-001	S-072	Dump Area C	2-8	3/13/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-073-0104-001	S-073	Dump Area C	1-4	3/13/2012	12:30	Soil	Grab	FS	Encore	TCL VOCs
S-074-0408-001	S-074	Dump Area C	4 - 8	3/13/2012	12:20	Soil	Grab	FS	Encore	TCL VOCs
S-075-0210-001	S-075	Dump Area C	2 - 10	3/13/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-076-0208-001	S-076	Dump Area C	2 - 8	3/13/2012	13:29	Soil	Grab	FS	Encore	TCL VOCs
S-077-0207-001	S-077	Dump Area C	2 - 7	3/13/2012	13:35	Soil	Grab	FS	Encore	TCL VOCs
S-078-0208-001	S-078	Dump Area C	2-8~	3/13/2012	12:00	Soil	Grab	FS	Encore	TCL VOCs
S-079-0207-001	S-079	Dump Area C	2 - 7	3/14/2012	11:50	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-079-0207-002	S-079	Dump Area C	2 - 7	3/14/2012	11:50	Soil	Grab	FD	Encore	TCL VOCs
S-080-0212-001	S-080	Dump Area C	2 - 12	3/14/2012	9:15	Soil	Grab	FS	Encore	TCL VOCs
S-081-0208-001	S-081	Dump Area C	2 - 8	3/14/2012	10:47	Soil	Grab	FS	Encore	TCL VOCs
S-082-0212-001	S-082	Dump Area C	2 - 12	3/14/2012	9:20	Soil	Grab	FS	Encore	TCL VOCs
S-083-0210-001	S-083	Dump Area C	2 - 10	3/14/2012	12:08	Soil	Grab	FS	Encore	TCL VOCs
S-084-0211-001	S-084	Dump Area C	2 - 11	3/14/2012	10:33	Soil	Grab	FS	Encore	TCL VOCs
S-085-0206-001	S-085	Dump Area C	2 - 6	3/14/2012	10:25	Soil	Grab	FS	Encore	TCL VOCs
S-086-0408-001	S-086	Dump Area C	4 - 8	3/14/2012	10:10	Soil	Grab	FS	Encore	TCL VOCs
S-087-0207-001	S-087	Dump Area C	2-7	3/14/2012	10:00	Soil	Grab	FS	Encore	TCL VOCs
S-088-0208-001	S-088	Dump Area C	2 - 8	3/14/2012	11:28	Soil	Grab	FS	Encore	TCL VOCs
S-089-0206-001	S-089	Dump Area C	2 - 6	3/14/2012	9:05	Soil	Grab	FS	Encore	TCL VOCs
S-090-0212-001	S-090	Dump Area C	2 - 12	3/14/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-091-0207-001	S-091	Dump Area C	2 - 7	3/14/2012	11:16	Soil	Grab	FS	Encore	TCL VOCs
S-092-0212-001	S-092	Dump Area C	2 - 12	3/14/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs
S-093-0210-001	S-093	Dump Area C	2 - 10	3/14/2012	10:38	Soil	Grab	FS	Encore	TCL VOCs

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sämple Time	Matrix	Collec- tion	Sample Type	Container Type	Analysis
S-094-0210-001	S-094	Dump Area C	2 - 10	3/14/2012	10:55	Soil	Grab	FS	Encore	TCL VOCs
S-095-0208-001	S-095	Dump Area C	2 - 8	3/14/2012	10:47	Soil	Grab	FS	Encore	TCL VOCs
S-096-1220-001	S-096	Dump Area C	12 - 20	3/14/2012	11:10	ु Soil	Grab	FS	Encore	TCL VOCs
S-166-0103-001	S-166	Dump Area E Perimeter	1 - 3	3/29/2012	12:45	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-166-0103-002	S-166	Dump Area E Perimeter	1 - 3	3/29/2012	12:45	Soil	Grab	FD	Encore	TCL VOCs
S-167-0103-001	S-167	Dump Area E Perimeter	1 - 3	3/29/2012	12:55	Soil	Grab	FS	Encore	TCL VOCs
S-168-0103-001	S-168	Dump Area E Perimeter	1 - 3	3/29/2012	13:00	Soil	Grab	FS	Encore	TCL VOCs
S-169-0103-001	S-169	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	FS	Encore	TCL VOCs
S-170-0103-001	S-170	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-171-0103-001	S-171	Dump Area E Perimeter	1 - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-172-0103-001	S-172	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-173-0103-001	S-173	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-174-0103-001	S-174	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-175-0103-001	S-175	Dump Area E Perimeter	1 - 3	3/29/2012	12:55	Soil	Grab	FS	Encore	TCL VOCs
S-176-0103-001	S-176	Dump Area E Perimeter	1 - 3	3/29/2012	13:00	Soil	Grab	FS	Encore	TCL VOCs
S-177-0103-001	S-177	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	FS	Encore	TCL VOCs
S-178-0103-001	S-178	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-179-0103-001	S-179	Dump Area E Perimeter	ì - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-180-0103-001	S-180	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-181-0103-001	S-181	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-182-0103-001	S-182	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-183-0103-001	S-183	Dump Area E Perimeter	1 - 3	3/29/2012	13:35	Soil	Grab	FS	Encore	TCL VOCs
S-184-0103-001	S-184	Dump Area E Perimeter	1 - 3	3/29/2012	13:40	Soil	Grab	FS	Encore	TCL VOCs

Notes:

MS/MSD = Matric Spike/Matric Spike Duplicate

FS = Field Sample

TCL = Target Compound List

FD = Field Duplicate

VOC = Volatile Organic Compounds

Table 1b. Post-Confirmation Sample Collection Summary Mansfield Trail Dump Site March 13 to 28, 2012

Sample ID	Sample Locatio		Depth (ft)	Sample Date	Sample Time	Matrix	Collec- tion	Sample Type	Container Type	Analysis
S-097-5253-001	n S-097	Dump Area A/Lower Trench	52 - 53	3/15/2012	12:30	Soil	Grab	FS	Encore	TCL VOCs
S-098-5051-001	S-098	Dump Area A/Lower Trench	50 - 51	3/15/2012	12:19	Soil	Grab	FS	Encore	TCL VOCs
S-099-5051-001	S-099	Dump Area A/Lower Trench	50 - 51	3/15/2012	12:12	Soil	Grab	FS	Encore	TCL VOCs
S-100-5051-001	S-100	Dump Area A/Lower Trench	50 - 51	3/15/2012	11:29	Soil	Grab	FS	Encore	TCL VOCs
S-101-5253-001	S-101	Dump Area A/Lower Trench	52 - 53	3/15/2012	12:00	Soil	Grab	FS	Encore	TCL VOCs
S-102-2627-001	S-102	Dump Area A/Lower Trench	26 - 27	3/15/2012	12:41	Soil	Grab	FS	Encore	TCL VOCs
S-103-1213-001	S-103	Dump Area A/Lower Trench	12 - 13	3/15/2012	11:10	Soil	Grab	FS	Encore	TCL VOCs
S-104-1213-001	S-104	Dump Area A/Lower Trench	12 - 13	3/15/2012	11:35	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-104-1213-002	S-104	Dump Area A/Lower Trench	12 - 13	3/15/2012	11:35	Soil	Grab	FD	Encore	TCL VOCs
S-105-0607-001	S-105	Dump Area A/Lower Trench	6-7	3/15/2012	11:53	Soil	Grab	FS	Encore	TCL VOCs
S-106-2425-001	S-106	Dump Area A/Lower Trench	24 - 25	3/15/2012	12:06	Soil .	Grab	FS	Encore	TCL VOCs
S-107-1617-001	S-107	Dump Area A/Lower Trench	16 - 17	3/15/2012	12:26	Soil	Grab	FS	Encore	TCL VOCs
S-108-0607-001	S-108	Dump Area A/Lower Trench	6-7	3/15/2012	12:30	Soil	Grab	FS	Encore	TCL VOCs
S-109-2425-001	S-109	Dump Area A/Upper Trench	24 - 25	3/15/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-110-2627-001	S-110	Dump Area A/Upper Trench	26 - 27	3/15/2012	11:01	Soil	Grab	FS	Encore	TCL VOCs
S-111-2930-001	S-111	Dump Area A/Upper Trench	29 - 30	3/15/2012	11:05	Soil	Grab	FS	Encore	TCL VOCs
S-112-1617-001	S-112	Dump Area A/Upper Trench	16 - 17	3/15/2012	10:45	Soil-	Grab	FS	Encore	TCL VOCs
S-113-1415-001	S-113	Dump Area A/Upper Trench	14 - 15	3/15/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-114-2425-001	S-114	Dump Area A/Upper Trench	24 - 25	3/15/2012	11:10	Soil	Grab	FS	Encore	TCL VOCs
S-115-3637-001	S-115	Dump Area A/Upper Trench	36 - 37	3/15/2012	11:17	Soil	Grab	FS	Encore	TCL VOCs
S-116-0102-001	S-116	Dump Area A/Upper Trench	1 - 2	3/16/2012	9:26	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-116-0102-002	S-116	Dump Area A/Upper Trench	1 - 2	3/16/2012	9:26	Soil	Grab	FD	Encore	TCL VOCs
S-117-0203-001	S-117	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:15	Soil	Grab	FS	Encore	TCL VOCs
S-118-0203-001	S-118	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:32	Soil	Grab	FS	Encore	TCL VOCs
S-119-0203-001	S-119	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:38	Soil	Grab	FS	Encore	TCL VOCs
S-120-0203-001	S-120	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:45	Soil	Grab	FS	Encore	TCL VOCs

Table 1b. Post-Confirmation Sample Collection Summary Mansfield Trail Dump Site March 13 to 28, 2012

Sample ID	Sample Locatio	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collec-	Sample Type	Container Type	Analysis
S-121-0203-001	S-121	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:44	Soil	Grab	FS	Encore	TCL VOCs
S-122-0203-001	S-122	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:50	Soil	Grab	FS	Encore	TCL VOCs
S-123-0203-001	S-123	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:55	Soil	Grab	FS	Encore	TCL VOCs
S-124-0203-001	S-124	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:00	Soil	Grab	FS	Encore	TCL VOCs
S-125-0203-001	S-125	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:06	Soil	Grab	FS	Encore	TCL VOCs
S-126-0203-001	S-126	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:10	Soil	Grab	FS	Encore	TCL VOCs
S-127-0203-001	S-127	Dump Area A/Upper Trench	2-3	3/16/2012	10:15	Soil	Grab	FS	Encore	TCL VOCs
S-128-0203-001	S-128	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:22	Soil	Grab	FS	Encore	TCL VOCs
S-129-3033-001	S-129	Dump Area A/Upper Trench	30 - 33	3/16/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-130-3637-001	S-130	Dump Area A/Upper Trench	36 - 37	3/16/2012	10:37	Soil	Grab	FS	Encore	TCL VOCs
S-131-2223-001	S-131	Dump Area A/Upper Trench	22 - 23	3/16/2012	10:45	Soil	Grab	FS	Encore	TCL VOCs
S-132-4041-001	S-132	Dump Area A/Upper Trench	40 - 41	3/16/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-133-1213-001	S-133	Dump Area A/Upper Trench	12 - 13	3/16/2012	10:54	Soil	Grab	FS	Encore	TCL VOCs
S-134-0809-001	S-134	Dump Area A/Upper Trench	8-9	3/16/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs
S-135-0203-001	S-135	Dump Area A/Upper Trench	2 - 3	3/16/2012	11:15	Soil	Grab	FS	Encore	TCL VOCs
S-136-0103-001	S-136	Dump Area B	1 - 3	3/27/2012	10:15	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-136-0103-002	S-136	Dump Area B	1 - 3	3/27/2012	10:15	Soil	Grab	FD	Encore	TCL VOCs
S-137-0103-001	S-137	Dump Area B	1 - 3	3/27/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-138-0103-001	S-138	Dump Area B	1 - 3	3/27/2012	10:25	Soil	Grab	FS	Encore	TCL VOCs
S-139-0103-001	S-139	Dump Area B	1 - 3	3/27/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-140-0103-001	S-140	Dump Area B	1 - 3	3/27/2012	10:35	Soil	Grab	FS	Encore	TCL VOCs
S-141-0103-001	S-141	Dump Area B	1 - 3	3/27/2012	10:40	Soil	Grab	FS	Encore	TCL VOCs
S-142-0103-001	S-142	Dump Area B	1 - 3	3/27/2012	10:45	Soil	Grab	FS	Encore	TCL VOCs
S-143-0103-001	S-143	Dump Area B	1 - 3	3/27/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-144-0103-001	S-144	Dump Area B	1-3	3/27/2012	10:55	Soil	Grab	FS	Encore	TCL VOCs
S-145-0103-001	S-145	Dump Area B	1 - 3	3/27/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs

Table 1b. Post-Confirmation Sample Collection Summary

Mansfield Trail Dump Site March 13 to 28, 2012

Sample ID	Sample Locatio	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collec- tion	Sample Type	Container Type	Analysis
S-146-0103-001	S-146	Dump Area B	1 - 3	3/27/2012	10:10	Soil	Grab	FS	Encore	TCL VOCs
S-147-0103-001	S-147	Dump Area B	1 - 3	3/27/2012	10:15	Soil	Grab	FS	Encore	TCL VOCs
S-148-0103-001	S-148	Dump Area B	1 - 3	3/27/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-149-0103-001	S-149	Dump Area B	1 - 3	3/27/2012	10:25	Soil	Grab	FS	Encore	TCL VOCs
S-150-0103-001	S-150	Dump Area B	1 - 3	3/27/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-151-0103-001	S-151	Dump Area B	1 - 3	3/27/2012	10:35	Soil	Grab	FS	Encore	TCL VOCs
S-152-0103-001	S-152	Dump Area B	1 - 3	3/27/2012	10:40	Sòil	Grab	FS	Encore	TCL VOCs
S-153-0103-001	S-153	Dump Area B	1 - 3	3/27/2012	10:45	Soil	Grab	FS	Encore	TCL VOCs
S-154-0103-001	S-154	Dump Area B	1 - 3	3/27/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-155-0103-001	S-155	Dump Area B	1 - 3	3/27/2012	10:55	Soil	Grab	FS	Encore	TCL VOCs
S-156-0103-001	S-156	Dump Area D Trench 4	1 - 3	3/28/2012	14:00	Soil	Grab	FD	Encore	TCL VOCs
S-157-2425-001	S-157	Dump Area D Trench 4	24 - 25	3/28/2012	14:10	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-157-2425-002	S-157	Dump Area D Trench 4	24 - 25	3/28/2012	14:00	Soil	Grab	FD	Encore	TCL VOCs
S-158-2425-001	S-158	Dump Area D Trench 4	24 - 25	3/28/2012	14:15	Soil	Grab	FS	Encore	TCL VOCs
S-159-2425-001	S-159	Dump Area D Trench 4	24 - 25	3/28/2012	14:20	Soil	Grab	FS	Encore	TCL VOCs
S-160-2425-001	S-160	Dump Area D Trench 4	24 - 25	3/28/2012	14:25	Soil	Grab	FS	Encore	TCL VOCs
S-161-1617-001	S-161	Dump Area D Trench 4	16 - 17	3/28/2012	14:30	Soil	Grab	FS	Encore	TCL VOCs
S-162-3637-001	S-162	Dump Area D Trench 4	36 - 37	3/28/2012	14:25	Soil	Grab	FS	Encore	TCL VOCs
S-163-3637-001	S-163	Dump Area D Trench 4	36 - 37	3/28/2012	14:20	Soil	Grab	FS	Encore	TCL VOCs
S-164-3637-001	S-164	Dump Area D Trench 4	36 - 37	3/28/2012	14:15	Soil	Grab	FS	Encore	TCL VOCs
S-165-3637-001	S-165	Dump Area D Trench 4	36 - 37	3/28/2012	14:10	Soil	Grab	FS	Encore	TCL VOCs

Notes:

MS/MSD = Matric Spike/Matric Spike Duplicate

FS = Field Sample

TCL = Target Compound List

FD = Field Duplicate

VOC = Volatile Organic Compounds

Table 1c.

Waste Charcterization Collection Summary Mansfield Trail Dump Site February 22 to April 12, 2012

Sample ID	Sampl	e Location	Depth (ft)	Sample Date	Sample	Matrix	Collection	Sample	Container	
7-mp-7-	Dump Area	Trench		-	Time			Туре	Type*	•
										Waste
S-001-0024-001	C	1	0 - 24	2/22/2012	14:10	Soil	Composite	FS	3 Glass Jars	Characterization
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						Waste
S-001-0024-002	С	1	0 - 24	2/22/2012	14:10	Soil	Composite	FD	3 Glass Jars	Characterization
		,						77.0	2 01 7	Waste
S-002-0030-001	С	1A	0 - 30	2/22/2012	14:35	Soil	Composite	FS	3 Glass Jars	Characterization Waste
		100		0/00/0010	15:00	g .::		ra	3 Glass Jars	Characterization
S-003-0024-001	В	1B	0 - 24	2/22/2012	15:00	Soil	Composite	FS	3 Glass Jais	Waste
0.004.0010.001	В	1C	0 - 18	2/22/2012	15:20	Soil	Composite	FS	3 Glass Jars	Characterization
S-004-0018-001	В	ic	0-18	2/22/2012	13:20	3011	Composite	ТЭ	J. Grass Jars	Waste
S-005-0024-001	В	1D	0 - 24	2/22/2012	15:30	Soil	Composite	FS	3 Glass Jars	Characterization
3-003-0024-001	Ь	10	0-24	212212012	13.30	5011	Composite	15	5 015	Waste
S-006-0024-001	E	3A	0 - 24	2/23/2012	10:48	Soil	Composite	FS	3 Glass Jars	Characterization
B-000-0024-001	<u> </u>	371		2,23,2012	100		- Constitution			Waste
S-007-0014-001	E	3B	0 - 14	2/23/2012	11:04	Soil	Composite	FS	3 Glass Jars	Characterization
5.007.001										Waste
S-008-0033-001	E	2D	0 - 33	2/23/2012	11:24	Soil	Composite	FS	3 Glass Jars	Characterization
				. :						Waste
S-009-0036-001	E	2C	0 - 36	2/23/2012	11:53	Soil	Composite	FS	3 Glass Jars	Characterization
							,			Waste
S-010-0029-001	E	3B	0 - 29	2/23/2012	13:28	Soil	Composite	FS	3 Glass Jars	Characterization
		,	,				-			Waste
S-011-0036-001	Е	2A	0 - 36	2/23/2012	13:50	Soil	Composite	FS	3 Glass Jars	Characterization
		•						<u> </u>	1 C1 Y	Waste
S-012-0041-001	Е	1C	0 - 41	2/23/2012	14:10	Soil	Composite	FS	3 Glass Jars	Characterization Waste
			مفو	0/02/0012	1405			F0	3 Glass Jars	Waste Characterization
S-013-0035-001	E	1B	0 - 35	2/23/2012	14:35	Soil	Composite	FS	5 Glass Jars	Waste
0.014.0020.001		1.4	0.20	2/22/2012	15.12	Soil	Commonito	FS	3 Glass Jars	Characterization
S-014-0030-001	E	1A	0 - 30	2/23/2012	15:12	2011	Composite	1,2	J Glass Jais	Waste
5.015.0024.001		LOWER D	0 - 24	2/24/2012	12:48	Soil	Composite	FS	3 Glass Jars	Characterization
S-015-0024-001	A	LUWEKD	0-24	2/24/2012	12.40	Suil	Composite	13	D Grabb Jars	

Table 1c. Waste Charcterization Collection Summary Mansfield Trail Dump Site February 22 to April 12, 2012

Sample ID	Sampl	e Location	Denth (ft)	Sample Date	Sample	Matrix	Collection	Sample	Container	Analysis*
Sample	Dump Area	Trench	Depin (it)	Sample Date	Time	MALIA	Concesson	Type	Type*	Анигуят
		*.						, ,		Waste
S-016-0023-001	A	LOWER C	0 - 23	2/24/2012	13:04	Soil	Composite	FS	3 Glass Jars	Characterization
				. ,						Waste
S-017-0022-001	A	LOWER B	0 - 22	2/24/2012	13:19	Soil	Composite	FS	3 Glass Jars	Characterization
				. :						Waste
S-018-0013-001	A	LOWER A	0 - 13	2/24/2012	13:31	Soil	Composite	FS	3 Glass Jars	Characterization
										Waste
S-019-0012-001	- A	UPPER C	0 - 12	2/24/2012	13:48	Soil	Composite	FS	3 Glass Jars	Characterization
g 000 001 g 001		· rmnen n	0.15	0/04/00:0						Waste
S-020-0017-001	<u>A</u>	UPPER B	0 - 17	2/24/2012	14:02	Soil	Composite	FS	3 Glass Jars	Characterization
0.001.0010.001	ļ. · 🛕	TEDDED A	0 10	2/24/2012	14.16			TIC	2 (2)	Waste
S-021-0018-001	A	UPPER A	0 - 1/8	2/24/2012	14:15	Soil	Composite	FS	3 Glass Jars	Characterization
S-022-0018-001	D ·	North Trench 1	0 - 18	3/2/2012	9:11	Soil	Camanasias	FS	3 Glass Jars	Waste Characterization
3-022-0016-001	<u> </u>	Noigh Trench I	0-16	31212012.	9:11	2011	Composite	F5	3 Glass Jars	Waste
S-023-0038-001	D	North Trench 1	0 - 38	3/2/2012	9:21	Soil	Composite	FS	3 Glass Jars	Characterization
		, , , , , , , , , , , , , , , , , , , ,		0,7,7,7	2,7=1	50.1	Composito	1.0	0 0.000 0.00	Waste
S-024-0028-001	D	North Trench 1	0 - 28	3/2/2012	9:45	Soil	Composite	FS	3 Glass Jars	Characterization
						,				Waste
S-025-0026-001	D	Center Trench 1	0 - 26	3/2/2012	9:58	Soil	Composite	FS	3 Glass Jars	Characterization
				`	,					Waste
S-026-0022-001	D	Center Trench 1	0 - 22	3/2/2012	10:10	Soil	Composite	FS	3 Glass Jars	Characterization
]		:				Waste
S-027-0024-001	D	Center Trench 1	0 - 24	3/2/2012	10:20	Soil	Composite	FS	3 Glass Jars	Characterization
										Waste
S-028-0034-001	D	South Trench 1	0 - 34	3/2/2012	10:32	Soil	Composite	FS	3 Glass Jars	Characterization
	· -									Waste
S-029-0022-001	D	South Trench 1	0 - 22	3/2/2012	10:42	Soil	Composite	FS	3 Glass Jars	Characterization
g 000 0000 001		0.45		0/0/0010						Waste
S-030-0027-001	D	South Trench 1	0 - 27	3/2/2012	11:03	Soil	Composite	FS	3 Glass Jars	Characterization
0.021.0024.001	D	Carith Transle 2	o 24	2/2/2012	10.55	0	G	TO.	2 Class I	Waste
S-031-0024-001	L. U	South Trench 2	0 - 24	3/2/2012	12:55	Soil	Composite	FS	3 Glass Jars	Characterization

Table 1c.

Waste Charcterization Collection Summary

Mansfield Trail Dump Site February 22 to April 12, 2012

Sample ID	Sampl	e Location	D_4L(6)	e	Sample	Matrix	Collection	Sample	Container	
Sample 10	Dump Area	Trench	Depth (ft)	Sample Date	Time	Matrix	Conection	Type	Type*	Analysis*
			-							Waste
S-031-0024-002	D	South Trench 2	0 - 24	3/2/2012	12:55	Soil	Composite	FD	3 Glass Jars	Characterization
,	15 15 1						,			Waste
S-032-0023-001	D	South Trench 2	0 - 23	3/2/2012.	13:11	Soil	Composite	FS	3 Glass Jars	Characterization
									. '	Waste
S-S033-0021-001	D	South Trench 2	0 - 21	3/2/2012	13:23	Soil	Composite	FS	3 Glass Jars	Characterization
							1			Waste
S-034-0018-001	D	North Trench 2	0 - 18	3/2/2012	14:05	Soil	Composite	FS	3 Glass Jars	Characterization
	` <u>_</u>						,			Waste
S-035-0026-001	D	North Trench 2	0 - 26	3/2/2012	14:20	Soil	Composite	FS	3 Glass Jars	Characterization
0.006.0000.001								,	2 01 1	Waste
S-036-0022-001	D	North Trench 2	0 - 22	3/2/2012	14:32	Soil	Composite	FS	3 Glass Jars	Characterization
0.005.005.001				0/0/0010	1440			70	2 () 1	Waste
S-037-0025-001	D	North Trench 2	0 - 25	3/2/2012	14:40	Soil	Composite	FS	3 Glass Jars	Characterization Waste
0.020.0022.001		NI - mails 775 m and 15 2	0 20	2/2/2010	15.05		G 4.	Fo	3 Glass Jars	Characterization
S-038-0022-001	D	North Trench 3	0 - 22	3/2/2012	15:05	Soil	Composite	FS	3 Glass Jars	Waste
S-039-0030-001	D	Center Trench 3	0 - 30	3/2/2012	15:15	Soil	Composite	FS	3 Glass Jars	Characterization
3-039-0030-001	U	Center Trench 3	0-30	3/2/2012	13,13	.3011	Composite	LO	J Glass Jais	Waste
S-040-0015-001	D	South Trench 3	0 - 15	3/2/2012	15:12	Soil	Composite	FS.	3 Glass Jars	Characterization
3-0-10-0013-001		South Helich 5	0-15	3/2/2012	. 13,.12	3011	Composite	13	5 Grass Jans	Waste
MTD-041212-AreaD-01	D	Center Trench 2	10 - 15	4/12/2012	12:35	Soil	Grab	FS	3 Glass Jars	Characterization
7	,	Contor Frontiel 2	10-13	1112012	12.55	5011	Giuo		2 2200 7410	,
				,			•			Waste
MTD-041212-AreaD-02	D ·	Center Trench 2	10 - 15	4/12/2012	12:30	Soil	Grab	FS	3 Glass Jars	Characterization

Notes:

TCL = Target Compound List

FS = Field Sample

VOC = Volatile Organic Compounds

FD = Field Duplicate

Container Type: 3 Glass Jars (2 oz, 4 oz and 8 oz)

MS/MSD = Matric Spike/Matric Spike Duplicate

Waste Characterization Analysis: Full TCLP (RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides), Total (VOC, SVOC, RCRA 8 metals)

Corrosivity, pH, Ignitability, Reacitve Cyanide and Sulfide, TPH GRP and TPH DRO

Sample Number:	Page Contract	S-041-0	210-001	S-041-0	210-002	S-042-0	207-003	S-043-0	212-001	S-044-0	207-001	S-045-0	207-001	S-046-0	208-001	S-047-0	207-001
Sampling Location:		S-4		S-(142	. S-0		S-C		S4		S-0		S-(
Matrix:	NUMBER	S		S			oil	Sc		S	***	S		Sc		S	
Units:	Soil		/kg		kg		/kg	1112			/kg	ug		0,0			/ka
	Cleamp	3/12/		3/12/			2012	3/12/		3/12/		3/12/		3/12/		3/12/	
Date Sampled:	Criteria	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL	Result	RL.
Parameter	(ig/kg)	- 4-4 44-1		ND	21	ND	34	ND	19	ND	24	ND	27	ND	25	ND	20
Dichlorodifluoromethane		ND	21	.ND	21	ND	.34.	.ND	.19	ND.	24	ND	27	ND	25	ND	20
Chloromethane	LOCAL	ND	21	ND	21	ND	34	ND	19	ND	24	ND ND	27	ND	25	ND	20
Vinyi Chiaride	10000	NDI	83	NDJ	82	ND J	140	ND.	75	NDJ	98	NDJ	110	NDI	100	NDJ	82
Bromomethane	F333444445-7-401		21.	ND	21	ND	34.	ND.	19	ND.	. 24	ND	27	ND.	25	ND	20
Chloroethane	3,000	ND ND		ND	21	ND	34	ND ND	19	ND.	24	ND	27	ND.	25	ND	20
Trichlaroffuoromethane	44-77		21				34	ND			24		27	ND ND	25	ND	20
1,1-Dichloroethene		ND	21	ND ND	21	ND	34	ND.	19	ND ND	24	ND ND	27	ND ND	25	ND	20
1,1,2-Trichioro-1,2,2-Trifluoroethane	1000	ND .	21.	ND ND	21	. ND	34	ND ND	19	ND	24	ND	27	ND ND	25	ND	20
Carbon Disulfide	,	ND	21	120		ND		200			49		55	93	51		41
Acetone	100000	100	41		41	1000	68		37	340		71 NDJ				75	
Methyl Acetnte	30.5	.NDJ	41	NDJ	41	ND J	68 34	NDJ	37 19	ND	49 24	ND	55 27	ND	51 25	ND J	41 20
Methylene Chloride	37541.72. 24.3461.4	ND	21	ND	21	ND ND	34	ND ND	19	ND	24	ND ND	27	ND ND	25	ND GN	20
trans-1,2-Dichloroethene		ND	21	ND ND		ND ND	34	ND ND	-	7.00	24	ND	27	ND	25	ND	20
Methyl tert-Butyl Ether	1,000	ND	21	ND ND	21	ND	34	. ND	19	ND ND	24	ND ND	27	ND	25	ND	. 20
1,1-Dichloroethane		ND	21	ND ND	21	ND ND	34	ND.	19	ND ND	24	ND ND	27	ND	25	ND	20
cls-1,2-Dichlaroethene	30000	ND ND	21	ND	41	ND	68	ND ND	37	ND	49	ND	55	ND -	51	ND	41
2-Butanoue			41		21			ND ND	19	ND	24	ND ND	27	ND ND	25	ND	20
Bromodichioromethane		ND	21	ND.		ND	34										
Chloroform	1000	ND	21	ND	21	ND ND	34	ND	19	ND	24	ND	27	ND ND	25 25	ND	20
1,1,1-Trichioroethane	50000.	ND	21	ND	21	ND	34	ND	19	ND.	24 24	ND	27			ND	20
Cyclohexane		ND	21	ND	21	ND		ND	19 19	ND ND	24	ND ND		ND ND	25 25	ND ND	20
Carbon Tetrachloride	1000	ND	21	ND	21 21	ND	34	ND ND			24		27 27	ND .			20
Benzene .	1000	ND ND	21	ND	21	ND ND	34	ND .	19	ND ND	. 24	ND L	27	ND.	. 25	ИD	20
1,2-Dichloroethane	1.000-0.000		21	ND	21						24				25	ND	
Trichloroethene	1000	'ND'	21	ND		ND.	34	ND	19	ND		ND	27	ND	25	ND	20
1,2-Dichleropropane		ND	21	ND ND	21	ND	34	ND	19	ND	24	ND	27	ND	25	ND	20
Bromodichloromethane	- 200	ND ND	21	ND	21	ND ND	34	ND	19	ND.	24	ND	27	ND ND	25 25	ND	20
cis-1,3-Dichloropropene		ND 1		ND	41		68	NDJ	37	NDJ	49	ND ND	55	ND ND		ND	20
4-Methyl-2-Pentanone	500000	ND1	41		.21	NDJ		NDJ	19		. 24:				51	ND	20
Toluene	500000	ND	21	ND ND	21	ND J	34	ND ND	19	ND	24	ND ND	27	ND ND	25 25	. ND	20
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	1000	ND	21	ND	21	ND.	34	ND	19	ND	24	ND	27	ND ND	25	ND	20
	1000	ND J	21	ND	21	NDI	34	NDJ	19	NDJ	24	ND	27	ND	25	ND.	20
Tetrachioroethene Methylcyclohexane		ND ND	21	ND	21	ND	34	ND	19	ND ND	24	ND	27	ND ND	25	ND	20
Dihramachlaramethane		ND ND	21	ND ND	21	ND ND	34	ND	19	ND	24	ND	27	ND ND	25	ND ND	. 20
1.2-Dibromocthage		NDJ	21	ND.	21	NDI	34	NDJ	19	NDJ	. 24	ND.	27	ND ND	25	ND	20
2-Hexanone	2000000	NDJ	41	ND	41	NDI	68	NDJ	37	NDJ	49	ND.	55	ND ND	51	ND	41
Chlorobenzene	1000	NDI	21	ND	21	ND I	34	ND3	19	NDI	24	ND	27	ND ND	25	ND.	20
Ethylbenzene	1000	NDJ	21	ND	21	NDJ	34	NDJ	19	NDJ	24	ND	27	ND.	25	ND	20
m/p-Xviene	2000	NDJ	21	, ND	21	ND J	34	NDI	19	NDJ	24	ND	27	ND	25	ND	20
o-Xylene	- COURT	NDJ	21	ND	21	NDI	34	NDJ	- 19	ND J	24	ND	- 27	ND	25	ND ND	20
Styrene	N 14 Sec.	NDJ	21	ND	21	ND I	34	NDJ	19	NDJ	24	ND ND	27	ND	25	ND	20
Bromoform	1000	.ND L	21	ND ND	21	ND ND	34	ND.	19	ND	24	ND	27	ND	25	ND	20
isopropyibenzene	1000	NDJ	21	ND	21	NDJ	34	ND J	19	NDJ	24	ND	27	ND ND	25	ND ND	20
1,1,2,2-Tetrachioroethane	1000	ND J	21	ND	21	ND J	34	ND.	19	NDJ	24	NDL	27	ND	25	ND	20
1.3-Dichlorobenzene	100000	NDJ	21	ND.	_21	NDI	. 34	NDI	19	NDJ	24	NDI	27	ND	25	ND ND	20_
1.4-Dichlorobenzene	100000	NDJ	21	ND	21	NDJ	34	ND J	19	NDJ	24	ND	27	ND ND	25	ND	20
1.2-Dichtorobenzene	50000	ND1	21	ND	21	NDI	34	NDJ	19	NDJ	24	ND ND	27	ND	25	ND	20
1.2-Dibromo-3-Chloropropane	30000	NDJ	21	ND	21	NDI	34	NDJ	19	NDJ	24	ND ND	27	ND.	25		20
1.2.4-Trichlorabenzene	100000	NDJ	21	ND ND	21	NDJ	34	ND1	19	NDJ	24	NDL	27	ND	25	ND.	20
1,2,3-Trichlorobenzene	100000			ND	21	NDJ	34	NDJ	19	NDJ						ND	
1 remoranemzene	100000000000000000000000000000000000000	נפא	21	עאן	41	נטאן	34	ו עשון	עו	I ND 3	24	NDL	27	ND .	25	ND	20

Notes:

RL = Reporting Limit

TCL = Target Compound List

VOC = Valutile Organic Compounds

ug/kg = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low.

K = The reported value may be biased high.

Sample Number:	Phi (1944)	S-048-0	207-001	S-040-0	207-001	S-050-0	209-001	S-051-0	206-001	S-052-0	210-001	S-053-0	210-001	S-054-0	210-003	S-055-0	209-001
Sampling Location:			04B		049		050	S-03,5-0			052		153	SH			055
Matrix:	NUDER		oil		oil		oil		oil		oil		oil .		oil		oil
Units:	Jel Champ		/kg		/kg		/kg		/kg		/kg		/kg		/kg		/kg
Date Sampled:	Champ		2012		2012		2012	3/12/		3/12/		3/12/		3/12/			/2012
Parameter	(ug/kg)	Result	RL	Result	RL	Result	RL	Result	RL.	Result	RL.	Result	RL	Remit	RL	Result	RL
Dichlorodiffuoromethane		ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Chloromethane	37.702	ND	15	ND	4.9	ND	6.4	, ND	5.2	ND.	21	ND	28	ND.	36	ND	25
Vinvi Chloride	10000	ND	15	ND	4.9	ND	6.4	ND	21	ND	21	ND	28	ND	36	ND	25
Bromomethane	1000	NDJ	60	NDJ	20	NDJ	26	NDJ	5.2	I DN	83	NDJ	110	NDJ	140	NDJ	100
Chloroethane	1000	ND	15	ND.	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Trichlorofluoromethane	12770	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND.	25
1.1-Dichloroethene	644.5	ND	15	ND	4.9	ND.	6.4	ND	5.2	ND	21	ND	. 28	ND	36	ND	'25
1,1,2-Trichloro-1,2,2-Triffunroethane	1000	ND	15	ND.	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Carbon Disulfide	1.00	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Acetone	100000	280	30	110	9.8	120	13	82	10	360	42	900	57	140	72	140 K	51
			30	NDJ	9.8	ND J	13.	NDJ	10	NDJ	42	NDJ	57	NDI	72	NDJ	51
Methyl Acetate Methylene Chloride		ND J	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND ND	25
	201000 2007.03	ND		ND ND	4.9	NĐ NĐ	6.4	ND D	5.2	ND ND	21	ND ND	28	ND	36	ND ND	25
trans-1,2-Dichloroethene	27.5	ND	15	ND ND	4.9	ND	6.4	ND ND	5.2	עא מא	21	ND	28	ND ND	36	ND	25
Methyl tert-Butyl Ether	Calabian .		15								21	ND	28	ND.	36.	ND	25
1,1-Dichloroethane	67.2.A. 5	ND	15	ND	4.9	ND	6.4	ND ND	5.2	ND ND	21	ND		ND.	36	ND	25
cis-1,2-Dichloroethene	231124	ND.	15	ND	4.9	ND	6.4		10		21	77	28 57	ND ND	72	ND	51
2-Butanone	50000	ND	30	. 13	9,8	. ND.	. 13	ND		ND					36	ND	25
Bromodichioromethane	202.3	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	42	ND	28	.ND			25
Chloroform	1000	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	
1,1,1-Trichloroethane	.39000	ND	15	ND.	4.9	ND	6.4	ND	5.2	ND	<u>, 21</u>	ND	28	ND	36	ND	25
Cyclohexane	50,700	'ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36.	ND	25
Carbon Tetrachloride	1000	ND	15.	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Benzene	1000	ND	15	ND.	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
1,2-Dichloroethaue	1000	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Trichloroethene	1000	ИD	15	ND.	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
1,2-Dichloropropane		ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Bromodichloromethane	· 25.000	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND.	.36	ND	25
cls-1,3-Dichloropropene	573942.5	ND	15	ND	4.9	ND	6.4	ND	10	ND	21	ND	28	ND	36	ND	25
4-Methyl-2-Pentanone	. (2.5.2)	.ND.	30	ND	9.8	ND	13	ND	5,2	NDI	42	NDJ	57	NDJ	72	NDJ	51
Toluene	500000	ND	. 15	ND	4.9	ND	6.4	ND	5.2	NDJ	21	NDJ	28	NDJ	36	NDJ	.25
trans-1,3-Dichloropropene	(100 Aug.)	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
1,1,2-Trichloroethane	1000	.ND.	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Tetrachloroethene	90,055	ND	15	ND	4.9	ND	6,4	ND	5.2	NDJ	21	ND I	28.	NDJ	36	NDI	25
Methylcyclohexane	81,77,78	ND.	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND	25
Dibromochloromethane .	177	ND	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND-	28	ND	36	ND	25 25
1,2-Dibromeethane		ND	15	ND	4.9	ND	6.4	ND	5.2	NDJ	. 21	NDI	28	NDJ	36	NDJ	
2-Hexanone	12.007	ND	30	ND	9.8	ND	6.4	ND	10	NDJ	21	IDI	28	NDJ	72	ND J	51
Chlorobenzene	1000	ND	15	ND	4.9	ND	6.4	ND	5.2	NDJ	21	NDJ	57	NDJ	36	NDJ	25
Ethylbenzene	3700	ND	15	ND	4.9	ND.	.6,4	ND	5.2	NDJ	21	NDJ	28	NDJ	36	NDJ	25
m/p-Xylene	C XECONA	ND	15	ND	4.9	ND	6.4	ND	5.2	NDJ	21	NDJ	28	NDJ	36	ND1	25
o-Xylene		ND	15	ND	4.9	ND	6.4	ND	5.2	ND.I	21	NDJ	28	NDJ	36	NDJ	25
Styrene	0.000	ND	15	ND	4.9	. ND	6.4	ND	5.2	NDJ	21	ND J	28	NDJ	36	ND J	25
Bremoform	1000	.MD.	15	ND	4.9	ND	6.4	ND	5.2	ND	21	ND	28	ND	36	ND .	25
Isopropylbenzene	d mater	ND	15	ND	4.9	ND	6.4	ND	5.2	NDI	21	NDI	28	NDJ	36	NDJ	25
1,1,2,2-Tetrachioroethane	1000	.ND	.15	ND	4.9	ND	6.4	ND	5.2	ND J	21	NDJ	28	NDJ	36	NDJ	25
1,3-Dichlorohenzene	100000	ND	15	ND	4.9	ND.	6.4	ДN	5.2	ND J	21	ND1	. 28	ND J	36	ND J	25
I,4-Dichlorobenzene	190000	ND	15	ND	4.9	ND	6.4	ND	5.2	NDI	21	I DN	28	NDJ	36	NDJ	25
1,2-Dichlorobenzene	50000	ND	15	. ND	4,9	ND	6.4	ND	5.2	ND1	21	NDJ	28	ND J	36	ND.1	25
1,2-Dibromo-3-Chloropropane	100	ND	15	ND	4.9	ND	6.4	ND	5.2	ND J	21	NDJ	28	NDJ	36	NDJ	25
1,2,4-Trichlorobenzene	100000	ND	. 15	ND	4.9	ND	6.4	ND	5.2	NDJ	21	NDJ	28	ND J	36	NDJ	25
1,2,3-Trichlorobenzene	32.75%	ND.	15	ND	4.9	ND	6.4	ND	5.2	NDJ	21	ND J	28	ND J	36	ND'J	25

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Section Sect	Sample Number:	9829 Techs	6 M4 M	004 001	CMTA	207 001	S-058-0	200 001	S-059-0	207:001	S-060-0	20C:001	S-060-0	204.002	S-061-0	210.001	S-062-0	212.001
Sect																		
Learne Section Secti		NOTION																
Parameter Septe Result EL Result																		
Discrimentations											47 540							
Chartenshase																		
Proceedings		0.0000000000000000000000000000000000000																
International Internationa		0.000000000000																
Colorador Colo											7.5.7							
14,2-Trichlures-1,2-D-Trichures-rethnes 100000 ND 9 ND 18 ND 93 ND 17 ND 25 ND 30 ND 27 ND																		
Carrison District Section Sect																		
Network																		
Methylacetate																		
Methylene Chartete 1988 ND 39 ND 18 ND 93 ND 17 ND 25 ND 30 ND 27 ND 27																		
Methy tet Bury Ether Street Methy Street Methy Street Methy Street Methy																		
		2000 C																
15-12-Delatoroethese 15-20-7 ND 99 ND 18 ND 93 ND 17 ND 25 ND 30 ND 27 ND 27		3250-25-003																
		September 1																
Stromochtane State State		50000																
Chloreform		7.300.0																
L.JTrichloreethane 360000 ND 19 ND 18 ND 9.3 ND 17 ND 25 ND 30 ND 27 ND		1000																
Cycloherune									1									
Carbon Tetrachloride																		
Participation Participatio																		
2-Dichleropropane	Trichloroethene																	
Semontchlaremethane 1606 ND 19	1,2-Dichloropropane	87,871	ND	19	ND	18	ND	9.3	ND	17	ND	25	ND	30	ND		ND	27
Selection Sele	Bromodichloromethane	2000	ND.	19				9.3	ND	17		25						
Methyl-2-Pentanone	cis-1,3-Dichloropropene		.ND	. 19	ND.		ND		ND.	17	ND	. 25	ND.		ND			
ND 19 ND 18 ND 93 ND 17 ND 25 ND 30 ND 27 ND 27	4-Methyl-2-Pentanone	90.00	NDJ	37	NDI	18	ND	9.3	ND	17	ND		NDJ	60				
1.12-Trichloreethane 10000 ND 19 ND 18 ND 9.3 ND 17 ND 25 ND 30 ND 27 ND 27 Petrachloreethane 10000 ND 19 ND 18 ND 9.3 ND 17 ND 25 ND 30 ND 27 N	Totuene	500000	NDI	19	NDJ	18	ND	19	NĐ	35	ND	25	ND J	30.	NDJ	27	ND	27
ND 19	trans-1,3-Dichloropropene		ND	19	ND	18	ND	9.3	.ND	17	.ND.	.25	ND.	.30	ND	27	ND	27
Methyleyelshezane	1,1,2-Trichloroethane	1000	ND	19	ND	18	ND	9.3	ND	17	ND	25	ND	30	ND	27	ND	27
Dirvemeethare Dirvemeethar	Tetrachloroethene		"נ'סא"	19	NDJ	18	ND	9.3	ND	17	ND	25	NDJ	30	NDJ	27	ND	27.
1.2-Dibroincethane	Methylcyclobexane	30.40	ND	19	ND	18	ND	9.3	ND	17 .	ND	25	ND	. 30	ND.	27	ND	27
Pilexanese ND 37 ND 36 ND 19 ND 17 ND 51 ND 60 ND 55 ND 55	Dibromochloromethane	100	ND	19	ND	18	ND	9.3	- ND	17	ND	25	ND	30	ND	27	ND	27
Callorobenzene	1,2-Dibromoethane		NDJ		ND J			9.3			ND	25		30	NDJ	27	ND	27
Ethythensene	2-Hexanone										ND L			.60	ND J.	.55.	NDL	55
Mp_Xylene	Chlorobenzene	727-73-55-70.															ND	27
-Xylene	Ethylbenzene				NDJ		ND		ND	17	ND	25	NDI	30	NDJ	27	ND	27
Styrese Styr	m/p-Xylene								ND		ND	. 25 _	. ND J	30	I GN	27	ND	27
Stromoform S1000 ND 19 ND 18 ND 9.3 ND 17 ND 25 ND 30 ND 27	o-Xylene	100.30					ND		ND		ND .		ND J	30	NDJ	27	ND	27
Sopropy Renzene Social S	Styrene																ND	27
1,1,2,2-Tetrachloroethane	Bromoform	.1000																
3-Ditchiorobenzene 1,00000 ND 19 ND 18 ND 9.3 ND 17 ND 25 ND 30 ND 27 ND 27	Isopropylbenzene	· 162332															ND	
A-Dichlorobenzene 100000 NDJ 19 NDJ 18 ND 9.3 ND 17 NDL 25 NDJ 30 NDJ 27 ND 27 2.4-Dichlorobenzene 550000 NDJ 19 NDJ 18 ND 9.3 ND 17 NDL 25 NDJ 30 NDJ 27 ND 27 2.7-Dibromo-S-Chloropropane 100000 NDJ 19 NDJ 18 NDL 9.3 ND 17 NDL 25 NDJ 30 NDJ 27 NDL 27 2.4-Trichlorobenzene 100000 NDJ 19 NDJ 18 NDL 9.3 ND 17 NDL 25 NDJ 30 NDJ 27 NDL 27 NDL	1,1,2,2-Tetrachloroethane												ND J		NDJ	27	ND	27
2-Dichlarobenzene	1,3-Dichlerobenzene														ND J	. 27	ND I	
	1,4-Dichlerobenzene																	
2.4-Trichlorobenzene 1700000 ND J 19 ND J 18 ND L 9.3 ND 17 ND L 25 ND J 30 ND J 27 ND L 27	1,2-Dichlorobenzene															27		27
10 10 10 10 10 10 10 10 10 10 10 10 10 1	1,2-Dibromo-3-Chloropropane	42000 Web 1000 NO															NDL	
2.3-Trichlerobenzene NDJ 19 NDJ 18 NDL 9.3 ND 17 NDL 25 NDJ 30 NDJ 27 NDL 27	1,2,4-Trichlorobenzene																NDL	
	1,2,3-Trichiorobenzene	diap.	NDJ	19.	NDJ	18	NDL	9.3	ND	17	NDL	25	ND J	30	NDJ	27	NDL	27

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Sample Number:	20 524452	5.063.0	212-001	C CACALO	210-001	2065.0	208-001	S-066-0	206-001	S-067-0	206-001	60680	208-001	S-069-0	212-001	S-070-0	206-001
Sample Aumber:			063		210-001 364		208-001	S-000-0		S-00/-0		S-008-0			169		070
Matrix:	NIDEP		óil		oil		oil	Sc		S					oil .		ail
Units:	Soil		/kg		/kg		/kg	110		.112			/kg		/kg		/kg
Date Sampled:	Criteria		2012	3/13		3/13		3/13/		3/13/		3/13/		3/13/			/2012
Parameter	(ug/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL.	Remit	RL
Dichierodiffperomethane		ND	28	ND.	24	ND	23	ND	8.6	ND	12	ND.	. 11	ND	32	NDJ	28
Chloromethane		ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Vinyi Chloride	10000	ND	28	ND	24	ND	90	ND	8.6	ND	12	ND	11'	ND	32	ND	28
Bromomethane	1000	NDJ	110	NDJ	97	NDJ	23	ND J.	34.	NDJ	48	NDI	45	NDJ	. 130	NDJ	28
Chloroethane	8 23.0	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Crickloroffuoromethane	11771	ND	. 28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
L1-Dichloroethene	deside	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	.11	ND	32	ND	.28
1,1,2-Trichlore-1,2,2-Triffnoreethane	.1000	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Carbon Disutfide	414.4	ND .	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ИD	32	ND	28
Acetone ,	100000	60	56	86	48	81	45	78	17 .	140	24	130	.22	200	64_	ND	56
Methyl Acetate	100000	NDJ	56	NDJ	48	NDJ	45	ND J	17	NDJ	24	ND J	22	ND J	64	NDJ	28
Methylene Chloride	200	ND	28.	ND	24	, ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
trans-1,2-Dichteroethene	HE TO	ND	28	ND	24	ND	23	ND	.8.6	ND	12	ND	.11	ND .	. 32	ND	28
Methyl tert-Butyl Ether	Circux:	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
1,1-Dichloroethane	2 12	ND	28	ND	24	ND	23	ND	8.6	מא	12	ND	11	ИD	32	ND	28
cis-1,2-Dichloroethene	17.00%	ND	28	ND	24	ND	23	ND	8.6	ND	.12	ND	11	ND	32	ND	28
2-Butanone	:50000	ND	56	ND	48	ND	45	ND	17	ND	24	ND	22	ND	64	ND	56
Bromodichioromethane	28.55	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Chloroform	1000	ND	28	ND	24	ND	23	.ND	<u>8.6</u> .	ND	12	ND	11	ND	32	ND	28
i,1,1-Trichloroethane	50000	N	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Cyclohexane	1000	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	11	ND.	32	ND	28
Carbon Tetrachloride	1000	ND	28	ND	24	.ND	23	ND	8.6	ND.	12	ND	- 11	ND	32	ND	28
Benzene /	1000	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND ND	11	ND ND	32	ND ND	28
2-Dichloroethane	1000	ND	28	ND	24	ND	23	ND	8.6	ND ND	12	ND ND	11	ND ND	32	ND	28
Trichloreethene	1000	ND	28	ND	.24	ND ND	23	ND ND	8.6 8.6	ND ND	12	ND.	11	ND ND	32	ND	28
L2-Dichloropropane	200	ND ND	28	ND ND	24	ND	23	ND GN	8.6	ND	12	ND ND	11	ND ND	32	ND	28
Bramodichloromethane	100000000	ND	28	ND	24	.ND	23	ND ND	8.6	ND	12	ND	11	ND	32	ND	28
cis-1,3-Dichloropropene	20000000	NDJ	56	ND -	48	NDJ	45	ND	17	ND	24	ND	22	ND	64	ND	56
4-Methyl-2-Pentanone Toluena	500000	NDJ	28	ND	24	NDJ	23	ND	8.6	ND	12	ND	11	ND	32	ND.	28
trans-1,3-Dichloropropene	300000	ND	28	ND	24	ND.	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
1.1.2-Trichloroethane	1000	ND	28	ND ND	24	ND	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Tetrachloroethene	3000	NDJ	28	ND	24	NDJ	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Methyleyclohexane		ND	28	ND	24	ND.	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
Dibromochlaramethane	70,700.7	ND	28	ND	24	ND	23	ND	8.6	, ND	12	ND.	11	ND	32	ND	28
1.2-Dibromoethane		NDJ	28	ND	24	NDJ	23	ND	8.6	ND	12	ND	11	ND	32.	ND	28
2-Hexanone	(0.602)	NDJ.	56	NDL	48	NDJ	23	NDL	17	NDL	24	NDL	22	NDL	64	ND	56
Chlorobenzene	71000	NDJ	28	ND	24	NDJ	45	ND	8.6	ND	12	ND.	11	ND	32	ND.	28
Ethylbenzene	5137.133	NDJ	. 28	ND	24	NDJ	23	ND	8.6	ND	12	ND	11	ND	32.	ND	28.
m/p-Xylene	215234199	ND.I	28.	ND	. 24	NDJ	23	ND	8.6	ND	. 12	ND	11	ND	32	ND	28
-Xylene	1.55200 CK	NDJ	28	ND	24	NDJ	23	ND	8.6	ND.	.12	ND	11	ND	32	ND	28
Styrene	90375	NDJ	28	ND	24	ND J	23	ND	8.6	ND	12	ND	11	ND	32.	ND	28
Bremeferm	1000	ND	28	ND	24	ND	23	ND	8.6	ND	12	ND	- 11	ND	32	ND	28
sopropylbenzene	K . 730797	NDJ	28	ND	24	NDJ	23	. ND	8.6	ND	12	ND	-11	ND	32	ND	28
,1,2,2-Tetrachloroethane	1000	NDJ	28	ND	24	ND J	23	ND	8.6	ND	12	ND	11	ND	32.	ND	28
,3-Dichlorobenzene	. 100000	ND I.	28	NDJ	24	NDJ	- 23	ND J	8.6	NDJ	12	NDI	11	NDJ	32	ND	28
A-Dichlorobenzene	100000	NDI	28	ND	24	NDJ	23	ND	8.6	ND	12	ND	- 11	ND	. 32	ND	28
,2-Dichlorobenzene	50000	NDJ	28	ND	.24	ND I	23	ND	8.6	ND	12	ND	11	ND	32	ND	28
,2-Dibromo-3-Chloropropane	1.1.1	NDJ	. 28	NDL	24	NDJ	23	NDL	8.6	NDL	12	NDL	11	ND L	32	ND	28
2.4-Trichlorobenzene	100000	NDJ	28	NDL	24	NDJ	23	NDL	8.6	NDL	. 12	NDL	11	NDL	32	ND	28
2.3-Trichlorobenzene	Great Man	ND 1	28	NDL	24	NDJ	23	NDL	8.6	NDL	.12.	NDL	. 11	ND L	32	ND.	28

Notes:

RL = Reporting Limit

TCL = Target Compound List

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VOC = Volatile Organic Compounds

18/R = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

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K = The reported value may be biased high.

[0	-	0.001.0	210-001.	S-072-0	200 001	S-073-0	104 001	S-074-0	400 001	S-075-0	210.001	S-076-0	200 001	S-077-02	207.001	S-078-0	100 001
Sample Number:	-																
Sampling Location:	NJDER	S-C		S-C		S-0			74	S-C			076	S-0		S-0	
Matrix: Units:	Soil	Se		Sc		Sc		S		Sc			oil	So		S	
	Cleanup		kg		/kg	ug/			/kg	ug			/kg .	ug/		ug	
Date Sampled:	Criteria	3/13/		3/13/		3/13/		3/13/		3/13/		3/13/		3/13/		3/13/	
Parameter	(ug/kg)	Result	RL	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL	Result	RE	Result	RL
Dichlorodifluoromethane		ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
Chloromethane		ND	26	ND	18	ND	35	ND	26	ND	24	, ND	19	ND	17	ND	24
Vinyl Chloride	10000	ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
Bromomethane	1000	NDJ	100	NDJ	71	NDJ	140	נמא	100	NDJ	.96	NDI	75	NDJ	68	NDJ	95
Chloroethane		ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
Trichloroffooromethane		ND	26	ND	18	ND .	35	ND	26	ND	24	ND	19	ND	17	ND	24
1,1-Dichloroethene	-	ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
1,1,2-Trichlore-1,2,2-Trifluoreethane	1000	ND	26	. ND	18	ND	35	ND.	26	ND	24	ND	19	ND	.17	ND	24.
Carbon Disulfide		ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
Acetone	100000	130	51	440	36	330	71	170	52	170	48	460	37	600	34	210	48
Methyl Acetate		NDJ	51	NDJ	36	NDJ	71	NDJ	52	NDJ	48	ND J	37	NDJ	34	NDJ	48
Methylene Chloride		ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND.	24
trans-1,2-Dichloroethene	-	ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24.
Methyl tert-Butyl Ether	57.7	ND	26	ND	18	ND	35	ND	26	ND	24	ND	. 19	ND	17	ND	24
1,1-Dichloroethane	32.243	ND	26	ND	18	ND.	35	ND	26	ИD	24	ND	19	ND	17	ND	24
cis-1,2-Dichloroethene		ND	26	ND	18	ND	35	ND	.26	ND	24	ND	. 19	ND	17.	ND	24
2-Butanone	50000	ND	51	ND	36	ND	71	ND	52	ND	48	95	37	58	34	ND	48
Bromodichloromethane		ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	.17	ND	24
Chloroform	1000	ND	26	ND	18	ND	35	ND	26	ND	_ 24_	. ND.	.19	ND	.17.	ND .	24
1,1,1-Trichioroethane	50000	ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
Cyclohexane		ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
Carbon Tetrachloride	1000	ND	26	ND	18	ND	35	ND	26	ND	24	ND	.19	ND.	17	. ND	24.
Benzene	1000	ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
1,2-Dichloroethane	1000	ND	26	ND	18	ND	35′	NDL	26	ND	24	ND	19	ND	17	ND	24
Trichtoroethene	1000	ND	26	ND	18	ND	35	ND.	. 26	ND	_24	ND.	. 19	ND	.17	ND.	24.
1,2-Dichloropropane		ND	26	ND	18	ND	35	ND	26	ND	24	ND	19	ND	17	ND	24
Bromodichloromethane	1 48 7	ND	26	ND	18	ND	35	ND	26	ND'	24	ND	19	ND	17	ND	24
cis-1,3-Dichloropropene	-	ND ND	26 .51	ND I	18 36	ND J	.35	ND	26 52	ND	24 48	ND.	19	ND	.17	ND	24
4-Methyl-2-Pentanone	500000	ND	26	NDI	18	NDJ	35	ND ND	26	NDJ	24	ND J	37 19	ND J 550 J	34	ND J	48
trans-1,3-Dichlaropropene	300000	ND ND	26	ND	18	ND ND	35	ND	26	ND	24	ND	19		17		24
I,I,2-Trichloroethane	1000	.ND	26.			ND.			26					ND	17	ND	
Tetrachloroethene	LIMIN	ND ND	26	ND J	18 18	NDJ	35. 35	ND ND	26	ND J	24	ND J	19	ND I	17	ND J	24
Methylcyclohexane	-	ND.	26	ND	18	ND	35	ND ND	26	ND	24	ND	19	ND I			24
Dibromochloromethane	-	ND.	26	ND ND	18	ND	35	ND	26	ND	24	.ND	. 19	ND ND	17	ND ND	24
1.2-Dibromoethane		ND ND	26	NDJ	18	NDJ	35	ND ND	26	NDJ	24	NDJ	19	NDJ	17	NDJ	24
2-Heranone	-	NDL	51	ND I	36	NDJ	71	ND.	52	NDI	48	NDI	37	NDI	. 34	NDI	48
Chlorobenzene	1000	ND	26	ND J	18	ND J	35	ND	26	NDJ	_ 24_	. ND J	19	NDI	. 17.	NDJ	24
Ethylbenzene	1,700	ND	26	.NDJ	18	NDJ	35	ND	26	NDJ	24	NDJ	19	NDI	17	NDI	24
m/p-Xylene		ND	26	NDJ	18	NDJ	35	ND	26	NDJ	24	NDJ	19	NDJ	17	NDJ	24
o-Xylene		ND	26	NDJ	18	ND)	35	ND	26	NDJ	24	NDJ	19	ND J	17	ND J	24
Styrene		ND	.26	NDJ	18	NDJ	35	ND	26	NDJ	24	ND J	19	NDJ	17	NDI	24
Bromoform	1000	ND	26	ND.	18	ND	35	ND	26	ND.	24	ND	19	ND ND	17	ND	24
Isopropylbenzene	11000	ND	26	NDJ	18	NDJ	35	ND	26	NDJ	. 24_	NDJ	19	ND J	17	NDJ	24
I.1.Z.2-Tetrachloroethane	1000	ND	26	ND.	18	NDJ	35	NDL	26	NDJ	24	NDJ	19	ND J	17	NDI	24
1.3-Dichlorobenzene	100000	ND)	26	NDJ	-18	I TON	35	NDJ	26	NDJ	24	ND J	19	NDJ	17	NDJ	24
1.A-Dichlorobenzene	100000	ND.	26	NDJ	18	NDJ	35	ND	26	NDJ	24	NDJ	.19	NDJ	. 17.	NDJ	24
I.2-Dichlorobenzene	50000	ND	.26	ND)	18	ND.	35	ND	26	NDJ	24	ND J	19	NDJ	17	NDJ	24
1,2-Dibromo-3-Chloropropane	24440	NDL	26	ND!	18	ND J	35	ND .	26	ND J	24	ND J	19	ND J	17	NDJ	24
1.2.4-Trichtorobenzene	100000	NDL	26	ND.	18	NDJ	35	NDL	26	NDJ	24	ND J	19	ND J	17_	NDJ	24
1,2,3-Trichforobenzene	100000	ND L	26	ND J	.18	NDJ	35.	NDL	26	NDJ	24	ND J	19	ND J			24
TAND. T I STREET ADCITION	p:::::::::::::::::::::::::::::::::::::	. ND.L.	20	LIND I	1.10	ונתאו	33.	LADE	40	LUUJ	44	נטא	1 19	נתא	17	NDJ	24

Notes:

RL = Reporting Limit

TCL - Target Compound List

voc = volatile Organic Compound ug/kg = micrograms per kilograms

ND - Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low.

Sample Number:	Market State	S-079-0	207.601	9:070.0	207-002	S-080-0	212:001	S-081-0	208-001	S-082-0	212:001	S-083-0	210.001	S-084-0	211-001	S-085-0	206,001
Sampling Location:			779		79		080	S-081-0.		S-0		S-003-0		S-0		S-003-0	
Matrix:	NUTER		7/ 5	S			oil	- Sc		Sc		S		Si		s	
Units:	Seil. Cleanup		/kg		/kg		/kg	1192			/Next		/kg		kg		/kg
	Cleanup		2012	3/14/			2012	3/14/		3/14/		3/14/		3/14/		3/14/	
Date Sampled: Parameter	Criteria	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
	(vg/lg)	ND	20	ND	. 20	ND	21	ND	21	ND	22	ND	27	ND	20	ND	19
Dichlerodiffuoromethane			20		20	ND	21	ND ND	21	ND	22	ND ND	27	ND	20	ND	19
Chloromethane		ND	20	ND ND	20	ND ND	21	ND	21	ND ND	22	ND	27	ND	.20	ND	19
Vinyl Chluride	10000	ND J	82	NDJ	82	NDJ	86	NDJ	83	NDI	89	I CON	110	NDJ	79	NDJ	79
Bromomethane	1000				20		21	ND	21	ND	22	ND ND	27	ND	20	ND.	19
Chioroethane		ND	20	ND		ND ND	21	ND ND	21	ND ND	22	ND	27	ND	20	ND	19
Trichlorofluoromethane		ND		ND	20		21		21	ND ND	22	ND	27	ND	20	ND	19
1,1-Dichloroethene		ND	20	ND	20	ND ND	21	ND ND	2i	ND	22	ND ND	27	ND	20	ND	19
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND		ND						ND ND	22	ND	27	ND	20	ND	19
Carbon Dixulfide		'ND '	20	ND	20	ND	21	ND	21				. 54	57	40	130 K	38
Acetone	100000	ND	41	69	41	77	43	120	42 42	240	44	79	54	NDJ	40	NDJ	38
Methyl Acetate	3000	NDJ	41.	NDJ	. 41	NDJ	43	NDJ		NDJ	44	NDJ	27	ND	20	ND	19
Methylene Chloride		'ND	20	ND	20	ND	21	ND	21	ND	22	ND					19
trans-1,2-Dichloroethene		ND	20	ND	20	ND:	21	ND	21	ND	22	ND	27	ND ND	20	ND	19
Methyl tert-Butyl Ether		ND	20	ND	20	ND	21	ND	21	ND	22	ND ND	27 27	ND ND	20 20	ND ND	19
1,1-Dichloroethane		ND	20	ND	20	ND	21	ND	21	ND							
cis-1,2-Dichlaroethene		ND	20	ND	20	ND	21	ND.	21	ND	22	ND	27	ND	20	ND	19
2-Butanoue	50000	NDJ	41	NDJ	41	ND J	43	NDJ	42	.ND J	44	NDJ	54	NDJ	40	NDJ	38
Bromodichloromethans	0.20	ND	20	ND	20	ND	21	ND	21	ND	22	ND	27	ND	20	ND	19
Chloreform	1000	ND	20	ND	20	ND	21	ND	21	ND.	22	ND	27	ND	20	ND	19
1,1,1-Trichioroethane	50000	ND	20	ND	20	ND	21	ND	. 21	.ND	22	ND.	27	ND	20	ND	
Cyclohexane		NDJ	20	NDJ	20	NDJ	21	NDJ	21	NDJ	22	NDJ	27	NDJ	20	NDJ	19
Carbon Tetrachioride	1000	ND	20	ND	20	ND	21	ND.	21	ND.	22	ND	27	ND	20	ND	19
Benzene	1000	ND	20	ND	20	ND	21	ND	21	. ND	. 22	ND	27	ND	20	ND	19
1,2-Dichloroethane	.1000	ND	20	ND	20	ND	21	ND	21	ND	22	ND	27	ND	20	ND	19 19
Trichloroethene	1000	ND	20	ND	20	ND	21	ND	21	ND.	22_	ND	27	ND ND	20	ND ND	19
1,2-Dichloropropane		ND	20	ND	20	ND.	21	ND	21	ND	22	ND					19
Bromodichloromethane		ХО	20	ND	20	ND	21	ND	21	ND	22	ND	27	ND ND	.20 20	ND ND	19
cis-1,3-Dichloropropene	- F. C.	ND	20	ND	20	ND	21	ND	21	ND	22	ND	27	NDJ	40	NDJ	38
4-Methyl-2-Pentanone	200	NDJ	41	ND J	41.	NDJ	43	NDJ	42	NDJ	44	NDJ	54 27	ND	20	NDJ	19
Totuene	500000	NDJ	20	NDJ	20	ND J	21	NDJ	21	ND ND	22	ND	27	ND ND	20	ND ND	19
trans-1,3-Dichloropropene		ND	20	ND	20	ND	21	ND	21		22	ND	27	ND	20	ND	19
1,1,2-Trichloroethane	1000	ND.	20	ND	20	ND J	21	ND J	21	ND.	22	NDJ	27	ND ND	20	NDJ	19
Tetrachloroethene		NDJ	20	NDJ			21		21	ND.	22	ND	27	ND ND	20	ND	19.
Methylcyclohexane		ND	20	ND	20	ND ND	21	ND ND	21	ND ND	22	ND	27	ND ND	20	ND ND	19.
Dibromochloromethane		ND.	20	ND	20	I UDJ	21	NDJ	21	ND.	22	NDJ	27	ND ND	20	NDJ	19
1,2-Dihromoethane		NDJ				NDI	43	NDJ	42	NDJ I	44	NDJ	54	NDJ	40	NDJ	38
2-Hexanone	1000	NDJ	41	NDJ	20	NDJ		NDJ	21	ND L	22	NDJ	27	ND ND	20	NDJ	19
Chlorobenzene	1000	NDJ	20	ND J	20	NDJ	21	NDI	21	ND ND	22	ND)	27	ND ND	20	NDJ	19
Ethylbenzene		NDJ	20	NDJ	20	נטא	21	NDJ	21	ND ND	22	ND I	27	ND	20	NDJ	19
m/p-Xylene	2.00000	NDI	20	NDI	20	NDJ	21	NDJ	21	ND	22	NDJ.	27	ND	20	NDJ	19
o-Xylene	300000000000000000000000000000000000000		20		20	NDI	21	NDI	21	ND.	22	ND J	27	ND	20	NDJ	19
Styrene		NDJ		NDI	20	ND	21	ND	21	ND.	22	ND	27	ND	20	ND	19
Bromoform	1000	NDL	20	ND.			21	NDJ	21	ND	22	NDJ	27	ND ND	20	NDI	19
Isopropyibenzene		NDJ	20	ND J	20	NDJ	-		21	ND.	22	NDI	27	ND	20	NDJ	19
1,1,2,2-Tetrachloroethane	. 1000	.ND.1	20	NDJ	20	NDJ	21	NDJ	21	ND I	22.	NDJ	27	NDI	20	NDJ	19
1,3-Dichlorobenzene	100000	NDJ	20	NDI	20	NDJ	21	NDJ			22	NDI	27	ND	20	NDJ	19
1,4-Dichlorobenzene	100000	NDJ	20	NDJ	20	NDJ	21	NDJ	21	ND			27	ND ND	20	NDJ	19
1,2-Dichlorobenzene	50000	NDJ	20	NDJ	20	NDJ	21	ND1	.21	ND	. 22.	NDI	27		20		19
1,2-Dibromo-3-Chioropropane		NDJ	20	NDJ	20	ND.1	21	NDJ	21	NDJ	22	NDJ		ND J	20	NDJ	19
1,2,4-Trichlorobenzene	100000	ND J	. 20 .	ND J	20	NDJ	- 21	NDJ	21	NDL	22	ND I	27	NDL			
1,2,3-Trichlorobenzene		NDJ	20	NDJ	20	NDJ	21.	NDJ	21	_NDL	22	ND J	27	NDL	20	NDJ	19

Notes:

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VCC = Volatic Organic Compounds

ug/kg = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low,

K = The reported value may be biased high.

Sample Number:	E. S.	C 004 0	400 001	C 007 0	S-087-0207-001		S-088-0208-001		S-089-0206-001		E 000 0012 001		S-091-0207-001		S-092-0212-001		210.001
Sampling Location:		S-086-0408-001 S-086		S-087		S-088		S-089		S-090-0212-001 S-090		S-091-0207-001		S-092-0212-001		S-093-0210-001 S-093	
Matrix:	NIDEP			Soil		Seil								Soil			
Units:	Soil	Soil ug/kg 3/14/2012 Result RL		eg/kg 3/14/2012		ug/kg 3/14/2012		Soil ug/kg 3/14/2012		Soil ng/kg		Soil ug/kg 3/14/2012		ug/kg		Soil ug/kg	
Date Sampled:	Cleanup																
	Crittale			Result		Result RL		Result RL		3/14/2012 Result RL		Result RL		3/14/2012 Result RL		3/14/2012 Result RL	
Parameter Dichlorodiffuoromethane	(ug/ing)	ND		ND	RL	ND		ND									
The state of the s			15		6.3		26		16	ND .	23	ND	24	ND	24	ND	20
Chloromethane	10000	ND	15	ND	6.3	ND '	26	ND	16	ND	23	ND	24	ND .	24	ND	.20
Vinyi Chloride	10000	ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND	24	ND	20
Bromomethane	1000	ND J	62	NDI	25	NDJ	110	NDJ	64	ND J	91	NDJ	97	NDI	97	NDJ	82
Chloroethane		ND	15	ND	6.3	ND	26	ND	16	ND	_23	ND.	24.	ND .	. 24	ND.	20
Trichlorofluoromethane		ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND	24	ND	20
1,1-Dichloroethene		ND	15	ND	6.3	ND	26	ND	1,6	ND.	23	ND	24	ND.	24	ND	20
1,1,2-Trichloro-1,2,2-Triffuoroethane	1000	ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24.	ND	24.	ND	20
Carbon Disuifide	1000000	ND.	15	ND	6.3	ND	26	ND	. 16	ND	23	ND	24	ND	24	ND	20
Acctone	100000	110	31	150	13	180	53	590	32	1200	45	210	48	280	49	220	41
Methyl Acetate		NDJ	31	NDJ	13	NDJ	53	NDJ	32	NDJ	45	NDJ	.48	NDJ	49	I GN	.41
Methylene Chloride		ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND	24	ND	20
trans-1,2-Dichloroethene		ND ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND	24	ND	20
Methyl tert-Butyl Ether	100000		15	ND	6.3	ND	26	ND	16	ND	23	ND.	24.	. ND	24	ND	20
1,1-Dichloroethane		ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND	24	ND	20
cis-1,2-Dichloroethene 2-Butanone	50000	ND J	15 31	NDJ	6.3	ND I	26	ND	1,6	ND	23	ND	24	ND	24	ND	20
					13		53	47 J	32	200 J	45	NDJ	48.	NDJ	49	NDI	.41
Bromodichloromethane		ND	15	.ND	6.3.	ND	26	ND	16	ND	23	ND	24	ND	24	ND	20
Chloroform	1000	ND'	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND	24	ND	20
1,1,1-Trichloroethane Cyclohexane	50000	ND J	15	ND	6.3	ND	26	ND	16	ND	23	ND.	24	ND	24	ND	20
	1000		. 15		.6.3	NDJ	26	ND J	.16	NDJ	23	NDJ	24	NDJ	24	NDJ	20
Carbon Tetrachloride Renzene	1900	ND ND	15 15	ND ND	6.3	ND	26	ND	16	ND .	23	ND	24	ND	24	ND	20
1.2-Dichloroethane	1000	ND	15	ND ND	6.3	ND ND	26 . 26	ND ND	16	ND	23 23	ND	24	ND	. 24	ND	20
Trichloroethene	1000	ND	15	ND	6.3	ND	26	ND	16	ND ND	23	ND ND	24	ND	24	ND	20
1,2-Dichloropropage	11,000	NĐ	15	ND	6.3	ND	26	ND ND	16	ND	23	ND	24	83 ND	24	ND	20
Bromodichioromethane	***	ND	15	ND	6.3	ND	26	ND	16	ND ND	23	ND ND		ND ND		ND	20
cis-1.3-Dichloropropene	25	ND	15	ND.	6.3	ND	26	ND ND	16	ND ND	23	ND D	24	ND ND	24	ND ND	20
4-Methyl-2-Pentanone		NDJ	31	NDI	13	NDJ	53	NDJ	32	NDI	45	NDJ	48	NDJ	49	NDJ	41
Toluene	500000	ND	15	ND.	6.3	ND	26	25.1	16	ND.	23	ND	24	ND ND	24	ND	20
trans-1,3-Dichloropropene	30000	ND	15	ND	6.3	ND	26	ND ND	16	ND ND	23	ND	24	ND	24	ND ND	20
1,1,2-Trichloroethane	1000	ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND ND	24	ND	20
Tetrachloroethene	1,000	ND	15	ND	6.3	NDJ	26	ND J	16	NDI	23	ND J	24	NDJ	24	ND ND	20
Methylcyclohexane		ND.	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND.	24	ND	20
Dibramochieromethane	30000	ND	15	ND	6.3	ND	26	ND	16	ND	23	ND	24	ND	24	ND.	20
1.2-Dibromoethane		ND	15	ND	6.3	NDJ	26	NDJ	.16	.NDJ	23	NDJ	24	NDJ	24	ND	20
2-Hexanone		NDJ	31	NDI	13	NDJ	53	NDJ	32	NDJ	45	NDJ	48	NDJ	49	NDJ	41
Chlorobenzene	1000	ND	15	ND	6.3	NDJ	26	NDJ	16	NDJ	23	NDJ	24	NDJ	24	ND	20
Ethylbenzene		ND	15	ND	6.3	NDJ	26	NDJ	16	NDJ	. 23	NDJ	24.	NDJ	24	ND	20
m/p-Xylene		.ND.	15.	.ND	6.3.	NDJ	26	NDJ	16	NDJ	23	NDJ	24	NDJ	24	ND	20
o-Xylene		ND	15	ND	6.3	NDJ	26	NDJ	16	NDJ	23	NDJ	24	NDJ	24	ND.	20
Styrene	3.0	ND.	15	ND	6.3	NDJ	26	NDJ	16	NDJ	_23	ND.J.	24.	NDJ	24	ND	20
Bromoform	1000	ND	15	ND	6.3.	ND.	26	ND.	16	ND	23	ND	24	ND.	24	ND	20
Isopropylbenzene	2.000	ND	15	ND	6.3	NDJ	26	ND	16	I LON	23	NDJ .	24	NDJ	24	ND	20
1,1,2,2-Tetrachloroethane	1000	ND.	15	ND	6.3	NDJ	26	NDJ	16	NDJ	23	.NDJ	. 24	NDJ	24	ND	20
1,3-Dichlorobenzene	100000	ND J	15	NDI	. 6.3	NDJ	. 26.	NDJ	16	NDJ	23	NDJ	24	NDJ	24	NDJ	20
1,4-Dichlorobenzene	100000	ND	15	ND	6.3	NDJ	26	NDJ	16	NDJ	23	NDJ	24	NDJ	24	ND	20
1,2-Dichlorobenzene	50000	ND	15	ND	6.3	NDJ	26	NDJ	16	NDJ	23	NDJ	24.	NDJ	24	ND	20
1,2-Dibromo-3-Chloropropane	338.333	NDJ	15	NDJ	6.3.	NDJ	26	NDJ	16	ND.	23	NDJ	24	NDJ	24	NDJ	20
1,2,4-Trichlorobenzene	_ 100000	NDL	15.	NDL	6.3	NDJ	26	NDJ	16	NDJ	23	NDJ	24	NDJ	24	NDL	20
1,2,3-Trichlorobenzene		NDL	15	NDL	6.3	NDJ	26	NDJ	16	NDI	23	NDI	24	NDI	24	NDL	20

Notes:

RL = Reporting Limit

TCL = Target Compound List

TCL = Target Compound List

VOC = Volatile Organic Compounds

ug/kg = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low.

K = The reported value may be biased high.

Sample Number:		S-094-0	210-001	S-095-0	0208-001	S-096-	220-001
Sampling Location:		S-4)94	S-	095	S-	096
Matrix:	NUCER	S	oil	5	oil	S	oil
Linfte	Soft	102	/kg	u	/kg	us	/kg
Date Sampled:	Cleaning		2012		/2012		/2012
Parameter	(rg/tg)	Result	RL	Result	RL .	Result	RL
Dichlorodifluoromethane	77.00	ND	20	ND	10	ND	-28
Chloromethane		ND	20	ND	10	ND	28
Vinyl Chloride	10000	ND	20	ND	10	ND	28
Bromomethane	71000	NDJ	78	NDJ	10	NDJ	28
Chloroethane	22.3	ND	20	ND	10	ND	28
Trichloroffuoromethane		ND	20	ND	10	ND .	28
1,1-Dichloroethene		ND	20	ĕ	10	ND	28
1,1,2-Trichioro-1,2,2-Trifluoroethane	1000	ND	20	ND	10	ND	28
Carbon Disulfide	(A) (2007)	ND	20	ND	10	ND	28
Acetone	100000	530	39	160	20	200	56
Methyl Acetate		NDJ	39	NDL	10	NDL	28
Methylene Chloride	7.43	ND	20	,ND	10	ND	28
trans-1,2-Dichloroethene	72365	ND`	20	ND	10	ND	28
Methyl tert-Butyl Ether	170000	ND	20	ND	10	ND	28
1,1-Dichloroethane	6.00	ND	20	ND	.10	ND	28
cis-1,2-Dichloroethene	133.75	ND	20	ND	10	ND	28
2-Butanone	50000	79 J	39	33	20	ND	56
Bromodichloromethane	(2.3.	ND	20	ND	10	ND	28
Chloroform	1000	ND	20	ND	10	ND	28
i,1,1-Trichioroethane	50000	ND	20	ND	10 .	ND	28
Cyclobexane	2 399.00	NDJ	20	ИĐ	10	ND	28
Carbon Tetrachloride	1000	- ND	20	מאיי	10	ND	28
Benzene	1000	ND	20	ND	10	ND	28
1,2-Dichloroethane	1000	ΝĐ	20	ND	10	ND	28
Trichloroethene	1000	ND	20	ND	10	ND	28
1,2-Dichteropropane		ND	20	ND .	10	ND	28
Bromodichioromethane	2 3-3	ND.	20	ND	10	ND	28
cis-1,3-Dichloropropene	200	ND	20	ND	10	ND	28
4-Methyl-2-Pentanone		NDJ	39	ND	20	ND	56
Toluene	500000	ND	20	300	10.	ND	28
trans-1,3-Dichloropropene	2.632.2	ND	20	ND	10	ND	\ <u>28</u>
1,1,2-Trichloroethane	1000	ND	20	ND	10	ND ND	28 28
Tetrachloroethene	#SACT C	ND	20.	ND ND	10	ND ND	28
Methylcyclohexane		ND	20	ND ND	10	ND ND	28
Dibromochleromethane	7.700	ND	20	ND	10	ND ND	28
1,2-Dibromoethane		ND	39	ND ND	20	ND ND	56
2-Hexanone	1000	ND	20	ND ND	10	ND	28
Chiorobenzene	1000	ND ND	20	ND.	10	ND ND	28
Ethylbenzene 	57.50	ND	20	ND.	10	ND	28
m/p-Xylene	933,530	ND	20	ND	10	ND	28
o-Xylene Styrene	10000	ND	20	ND	10	ND	28
Bromoform	1000	ND	20	ND	10	ND	28
	1000	ND	20	ND ND	10	ND	28
sopropyibenzene	1000	ND.	20	ND	10	ND	28
1,1,2,2-1 etracasoroetame 1,3-Dichiorobenzene	100000	ND J	20	IDI	10	NDI	28
LA-Dichiorobenzene	100000	ND	20	ND.	10	ND ND	28
LA-Dichiorobenzene	50000	ND ND	20	ND	10	ND	28
1,2-Dibromo-3-Chloropropane	34500	NDJ	20	ND	10	ND	28
1.2-Intromo-3-Chiaropropane 1.24-Trichlorobenzene	100000	NDL	20	ND	10	ND	28
1,2,3-Trichlorobenzene	Francia	NDL	20	ND	10	ND	28

Notes:

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Dump Area E Analytical Summary TCL VOC Analysis - Mansfield Trail Dump March 29, 2012

Sample Number		S-166-010	17 001	0 166 01			02 001	0.150.00	2.001	B 160 ***	22.001	6.100	0103 001		107 001	le 170 010	
Sample Number:	NUDEP	S-100-010 S-16		S-166-010 S-16		S-167-01		S-168-01		S-169-010 S-16			0103-001 170	S-171-0 S-1		S-172-010	3-00) 172
Matrix:	Soil	Soi		Soi		Soi		Soi		Soil			ielt	Sc			oil
Units:	Cleanup Criteria	ug/k		ug/k		ug/k	g	ug/k	R	ug/k			/kg	ug/		.ug	/kg
Date Sampled:	Criteria	3/29/2		3/29/2		3/29/2		3/29/2		3/29/20			V2012	3/29/			2012
Parameter Dichlorodiffuoromethane	(m/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Chloromethan		ND	8	ND ND	8.3	ND	8.2	ND .	7.3	ND	8.7	ND	13	ND	8.9	ND.	8.1
Vinvi Chlorida	10000	ND	.8. R		8.3	ND	8.2	. ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
Bromomethans	1000	NDI	8	ND.J.	8.3 8.3	ND J	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
Chloroethan	1000	ND	- 8		_	ND -	8.2	ND	7.3	ND	8.7	NDJ	13	NDJ	8.9	NDJ	8.1
Trichlorofluoromethan		ND	8	ND ND	8.3 8.3	ND ND	8.2	ND ND	7.3	ND	8.7 8.7	ND ND	13	ND ND	8.9 8.9	ND.	8.1
1.1-Dichloroethan		ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND ND	8.9	ND	8.1 8.1
1,1,2-Trichloro-1,2,2-Triffuoroetham	1000	. ND.	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9 8.9	ND	8.1
Carbon Disulfids		ND	8	ND	8.3	ND	8.2	ND	73	ND	8.7	ND	13	ND	8.9	ND	8.1
	100000	46	.16.	68	17	66	16	58	15	78	17	270	26	190	18	75	16
Methyl Acetate		ND	8	ND	83	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND.	8.1
Methylene Chiorida		ND.	8	ND.	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
trans-1,2-Dichloroethem	40,000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
Methyl tert-Butyl Ether		ND J	. 8	ND J	8.3	NDJ	8.2	NDJ	7.3	NDJ	8.7	NDJ	13	NDJ	8.9	ND3	8.1
1,1-Dichloroethens	14400	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND.	8.9	ND.	8.1
cis-1,2-Dichloroethens		ND	8	ND	. 8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
2-Butanone	50000	ND ·	16	ND	17	ND	16	ND	15	ND	17	35	26	22	. 18	ND	16
Bromochlorometham	Special Control	ND.	. 8	ND	8.3	. ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
Chloroform	1000	ND	8	ND	8.3	ND.	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	.8.1
1,1,1-Trichloroethans	50000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
Cyclohexane	4.0	ND	8	ND	8.3	ND	8.2	ND.	.73	ND	8.7	ND.	-13	ND	8.9	ND	8.1
Carbon Tetrachiorida	1000	ND	.8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
Benzene	1000	ND	. 8	ND	8.3.	ND	8.2	ND	7.3	· ND	8.7	ND.	13	ND.	8.9	ND	8.1
1,2-Dichloroetham	1000	ND	8	ND	8.3	ND	8.2	, ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
Trichloroethens	1000	3	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND .	.13	ND	8.9	ND	8.1
1,2-Dichleropropant		ND	. 8	Ð	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.7
Bromodichloromethan		Œ.	8	Ð	8.3	ND.	8.2	ND	7.3	ND	8.7	ND	_13	ND.	8.9	ND	8.1
cis-1,3-Dichloropropens		.ND	.8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
4-Methyl-2-Pentanons	1000	ND	16	ND.	17	NID	16	ND	15	ND.	.17	ND_	26	ND	18	ND	16
	500000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
trans-1,3-Dichloropropens		ND	.8	ND	8.3	-ND	8.2	ND	73.	ND	8.7	ND	13	ND	8.9	ND	8.1
	1000	, ND	.8	ND	8.3	ND	8.2	ND.	7.3	ND	8.7	ND	13	ND.	8.9	ND	8.1
Tetrachloroethens	Sec.	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND.	13	ND	8.9	ND	8.1
Methylcyclohexam		ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND.	.13	ND.	8.9	ND	8.1
Dibromochloromethan		ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND:	.13	ND	8.9	ND	8.1
2-Hexanone		ND	. 8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	20.	13	ND.	8.9	ND	8.1
	1000	ND ND	16	ND	17	ND	16	ND	15	ND	.17	.ND	26	ND	18	ND	16
Ethylbenzens	1000	ND ND	.8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ХĐ	8.9	ND	8.1
m/p-Xylene		ND	8	ND ND	8.3	ND.	8.2	ND	7.3	NĐ	8.7.	ND.	.13	. ND	8.9	ND	8.1
o-Xylene	(10)	ND	8	ND ND	8.3 8.3	ND ND	8.2 8.2	· ND	7.3	ND	8.7	ND	13	ХĐ	8.9	ND	8.1
Styrene	- 0	NDL	.8.	ND	8.3	ND	8.2	ND ND	7.3	ND	8.7	ND .	13	ND	8.9	ND	8.1
Bromoform	1000	ND	,a. 8	ND					7.3	NĐ	8.7	ND	13	ND	8.9	ND	8.1
Isopropylbenzeni	1600	ND ND	. 8	ND	8.3	ND ND	8.2 8.2	ND ND	7.3.	ND.	8.7	ND	13	ND	8.9	ND	8.1
1,1,2,2-Tetrachloroethans	1000	ND ND	- 8 8	ND ND	8.3	ND ND	8.2	ND ND	7.3 7.3	ND ND	8.7	ND	13	ND	. 8.9	ND	8. ř
	100000	NDL	. 8.	ND ND	8.3	ND	8.2	ND	7.3	ND ND	8.7	ND	13	ND	8.9	ND	8.1
	100000	NDL	8	ND	8.3	ND ND	8.2	ND	7.3	ND ND	8.7	ND	13	ND	8.9	ND	8.1
	50000	NDL	. 8	ND	8.3	ND	8.2	ND ND	7.3	ND	8.7	ND	. 13	ND	8.9	ND	8.1
	20000	NDL	8	ND	8.3	ND	8.2	ND	7.3	. ND	8.7 8.7	ND ND	13	ND	8.9	ND	8.1
	100000	NDL	8.	ND	8.3	ND.	8.2	ND	7.3	ND	8.7	ND ND	13	ND ND	8.9	ND ND	8.1 8.1
			. 0.														

Notes:

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Sample Number:	× k	S-173-010	LOGI	3-174-010	-001	S-175-0103	-001	S-176-0103	-001	S-177-0	103-001	S-178-01	03-001	3-179-01	03-001	S-180-0	103-001
Sampling Location:	Military		173		174	S-1		S-1		S-1		S-1		S-17	79	S-1	80
Matrix	Seil		ośl	S	oil	Se	al	Sc	il .	So	pil	So	il	So	1	. Se	
Units:	Cleanup		/kg		/kg		kg	Ug/		12,0/		ug/l		119/1			Arg
Date Sampled:	Crizma		2012		2012	3/29/		3/29/		3/29/		3/29/2		3/29/2			2012
Parameter.	(vs/ks)	Result	RL	Result	RL	Result	RL	Renalt	RL	Result	RL	Result	RL	Result	RL	Remit	RL
Dichlorodifluoromethane		ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
Chloromethan		ND.	8.9	ND.	9.6	ND	8.6	ND	9.3	ND	9.4	NĐ	8.3	ND	10	ND	7.3
Vinyl Chloridi	10000	Ð	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
Bromomethans	1000	NDJ	8.9	NDI	9.6	ND J	8.6	NDJ	9.3	NDJ	9.4	ND J	8.3	ND1	10	NDJ	7.3
Chloroethans		Ð	8.9	ИD	9.6	ND	8.6	ND	9,3	ND	9.4	.ND_	8.3	ND	10	ND	7.3
Trichlorofluoromethan		ND	8.9	ND.	9.6	ND	8.6	ND)	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
1,1-Dichloroethans		ND.	8.9	УĐ	9.6	ND	8.6	ND	9.3	ND .	9.4	ND.	8.3	ND	10	ND	7.3
1,1,2-Trichloro-1,2,2-Trifluoroethans	1009	ND	8.9	ND.	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
Carbon Disulfids		B	8.9	DΩ	9.6	ΝD	8.6	ND	9.3	ND	9.4	.ND	8.3	ND	10	ND)	7.3
Acetone	100000	190	18	180	19	150	17	290	19	240	19	97	17	180	21	99	15
Methyl Acetate	: D = 32	Æ	8.9	ND	9.6	ND	8.6	ND	9.3	МD	9.4	ND	8.3	ND	10	ND	7.3
Methylene Chlorid:	140	ND	8,9.	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
trans-1,2-Dichloroethem		ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND.	8.3	, ND	10	ND	7.3
Methyl tert-Butyl Ether	:: : *\$<*	NDJ	8.9	ND J	9.6	NDJ	8.6	ND1	9.3	ND.	9.4	I GN	8.3	NDJ	10	ND J	7.3
1.1-Dichloroethene	Time	МĐ	8.9.	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
cis-1,2-Dichloroethen	01718	ND	8.9	43	9.6.	24	8.6	ND	9.3	12	9.4	ND	8.3	ND	10	22	7.3
2-Butanone	50000	ND	18	ND	/ 19	17	17	23	19	20	19	ND	. 17	. 21	21	ND	7.3
Bromochloromethan	78217	ND	8.9	ND	9.6	ND	8.6	ND.	9.3	ND	9.4	ND	8.3	3	10	ND	7.3
Chigroform	1000	ND	8.9	ND	9.6	ND	8.6	ND:	9.3	ND	9.4	ND	8.3	ИD	10.	ND	7.3
1.1.1-Trichloroethans	50000	ND	8.9	ND	9.6	ND	8.6	ND.	9.3	ND	9.4	ND .	8.3	Ŕ	10	ND	7.3
Cyclohexans	200	ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	. 10_	ND	7.3
Carbon Tetrachloridi	1000	ND	8.9	ND	9.6	ND	8.6	ND.	9.3	ND.	9.4	ND	8.3	ND	10	ND	7.3
Benzent	1000	ND .	8.9	ND	9.6	ND	8.6	ND.	9.3	ИĎ	9.4	ND	8.3	ΔN	10	ND	7.3
1,2-Dichloroethant	1000	ND	8.9	ND	9.6	ND	8.6	ND	9.3	. ND	9.4	ND	8.3	ž	10	B	7.3
Trichloroethens	1000	11	8.9	100	9.6	82	8.6	30	9.3	26	9.4	ND	8.3	14	10	14.	7.3
1,2-Dichloropropans		ND	8.9	ND	9.6	ND	8.6	ND	9.3	. ND	9.4	ND	8.3	ND	10	Ð	7.3
Bromodichloromethan:		ND	. 8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	Ð	10	Ŋ.	7.3
cis-1,3-Dichloropropens	7	ND	8.9	ND	9.6	ND	8.6	ND	9.3	. ND	9.4	NO.	8.3	ND	10	Ð	7.3
4-Methyl-2-Pentanon		ND.	18	ND	9.6	ND	17	ND	19	ND	19	ND	17	ND	21	ND.	15
Toluene	500000	ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ХĐ	7.3
trans-1,3-Dichloropropens		ND.	. 8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
1,1,2-Trichloroethans	1000	ND	8.9	, ND	9.6	ND	8.6	ND	9.3	ND .	9.4	ND	8.3	ND	10	ND	7.3
Tetrachloroethens	200	ND.	_8.9.	ND	9.6	ND	8.6	ND	9.3	ğ	9.4	ND	8.3	ND	10	ND	7.3
Methyleyclohexans		ND	8.9	ND	9.6	ИD	8.6	ND	9.3	ND:	9.4	ND	8.3	ND	10	ND	7.3
Dibromochloromethan		ND.	8.9	ND.	9.6	ND	8.6	ND	9.3	ДD	9.4	ND	8.3	ND	10	ND	7.3
1.2-Dibromoethans	9.2	ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
2-Hexanone	*.077	ND	18	ND	9.6	ND	17	ND	19	ND	19	ND	17	ND .	21.	ND.	15
Chlorobenzent	1000	ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
Ethylbenzenc		ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND.	8.3	ND	10	ND	7.3
m/p-Xylene	- 701.0	NĐ	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
o-Xylene	N. Ca	ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10 .	.ND	7.3
Styrene	1.2	ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND.	8.3	ND	10	ND	7.3
Bromeform	1000	ND	-8.9	.ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
Isopropyibenzeni		ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
1,1,2,2-Tetrachloroethans	1000	ND	.8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
1,3-Dichlorobenzens	100000	ND	- 8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
1.4-Dichlorobenzens	100000	ND	8.9	ND	9.6	ND	8.6	ND:	9.3	ND	9.4	ND	8.3	. ND	10	ND	7.3
1,2-Diehlorobenzens	50000	ND	8.9	ND	9.6	ND.	8.6	ND	9.3	ND	9.4	ND	8.3.	ND	10	ND	7.3
1,2-Dibromo-3-Chloropropans	5 T 3	.ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3.	ND	10	ND	7.3
I.2.4-Trichlorobenzent	100000	ND	8.9	ND	9,6	ND	8.6	. ND	9.3	ND	9.4	ND	8.3	ND	10	ND	7.3
1.2.3-Trichlorobenzent		ND	8.9	ND	9.6	ND	8.6	ND	9.3	ND	9.4	ND	8.3	ND .	10	ND	7.3

Notes:

RL = Reporting Limit

TCL = Target Compound List

VOC = Volatile Organic Compounds

ug/kg = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low.

K = The reported value may be biased high.

Dump Area E Analytical Summary TCL VOC Analysis - Mansfield Trail Dump March 29, 2012

Sample Number:	3451	S-181-0		S-182-0			103-001	S-184-01	
Sampling Location:	NUDEP	S-1		S-1			183	S-1	84.
Matrix	5o0	Sc		Sc			cil	So	
Units:	Cleanup	ug		ug/		01	/kg	119/	kg
Date Sampled:	Criticia	3/29/ Result	2012 RL	3/29/. Result	2012 RL	Result	/2012 RL	3/29/2 Result	2012 RL
Dichlorodiffuoromethane	(ve/ks)	ND	9.7	ND	14	ND.	19	ND ND	11
Chloromethan		ND	9.7	ND D	14	ND	19	ND ·	11
/bryl Chlorida	10000	ND	9.7	ND	14	ND	19	ND ND	11
Bromomethan	1000	ND I	9.7	ND J	14	NDJ	19	נסא	11
Chloroethane	1000	ND	9.7	ND ND	14	ND	19	ND	11
Crichlorofluorometham		ND	9.7	ND ND	.14	ND	19	ND	
1.1-Dichloroethan		ND	9.7	ND ND	14	ND	19	ND	11
1.1.2-Trichloro-1.2.2-Triffuoroetham	1000	ND	9.7	ND	14	ND	19	ND ND	11
Carbon Disulfide	1000	ND	9.7	ND					
Acetone	100000	320	19	310	28	ND 380	19	ND	21
	trancon	ND ND						410	
Methyl Acetate			9.7	ND	14	ND.	19	ND.	. 11
Methylene Chlorids trans-1.2-Dichloroethens		ND ND	9.7	ND ND	14	ND ND	19	ND	11
								ND.	- 11
Methyl tert-Butyl Ether		IDN	9.7	NDJ	14	ND J	19	NDJ	- 11
l,1-Dichloroethens cis-1,2-Dichloroethens		ND	9.7	ND .	. 1,4	ND.	19	ND	. 11
	****	ND	9.7	ND	14	ND	19	ND	11
2-Butanone	50000	34	.19	74	28	. 98	. 39	.38	21
Bromochloromethan		ND	9.7	ND	14	ND	19	ND.	- 11
Chloroform	1000	ND	9.7	ND .	14	ND .	19	ND	. 11
,1,1-Trichloroethane	50000	ND	9.7	ND	14	ND	19	ND	- 11
Cyclohexane		ND	9.7	ND .	. 14	ND	19	ND	- 11
Carbon Tetrachlorids Benzene	1000	ND	9.7	ND .	14	ND	19	ND	11
	0001	ND	9.7	. ND.	.14.	.ND	19	ND.	. 11
,2-Dichloroetham	Accompany of the Control of the Cont	ND	9.7	ND	14	ND	19	ND	11
Trichloroethens	1000	ND.	9.7	ND .	. 14	ND	19	14	- 11
,2-Dichleropropans		ND	9.7	ND	14	ND	19	ND	11
Bromodichloromethan		ND	9.7	ND .	. 14	ND.	19	ND	11
is-1,3-Dichloropropens		ND	9.7	ND	14	ND	19	ND	11
Toluene	500000	ND	19	ND	28	ND_	39	ND.	.21
rans-1,3-Dichloropropens	300000	ND	9.7	ND	14	ND	19	ND	- 11
1.1.2-Trichloroethans	1000	ND ND	9.7	ND	. 14	ND	19	ND.	11
Tetrachloroethens	EUUN .	ND ND	9.7	ND ND	14	ND	19 19	ND	11
Methylcyclohexans		ND ND	9.7	ND ND		ND.		. ND	tı'
Dibromochloromethan		ND	9.7	ND	14	ND	19	ND	11
1.2-Dibromoethans		ND	9.7	ND ND	14	ND ND	19	ND ND	. 11
2-Hexanone		ND	19	ND	28	ND ND		ND.	11 21
Chlorobenzens	1000	ND	9.7	ND	14	ND ND	39	. ND.	.21
Ethylbenzeni	1000	ND	9.7	עא ND	14	ND .	19	ND.	
n/o-Xvlene	22.556	ND ND	9.7	ND.	14	ND ND	19	ND ND	11
-Xylene		ND	9.7	ND.	_ 14	ND ND	19	ND.	- 11
styrene	89626 X 965	ND	9.7	ND .	14	ND ND	19	ND	11
Bromoform	1000	ND	9.7	ND	- 14	ND	19	ND.	11
Sopropylbenzenc	14/1/	ND	9.7	ND	14	ND	19	ND ND	
.1.2.2-Tetrachloroethani	1000	ND	9.7	ND					11
3-Dichlorobenzens	100000	ND ND	9.7	ND	.14	ND.	19	ND	- 11
4-Dichlorobenzeni	100000	ND	9.7	ND ND	14	ND	19	ND	11
.2-Dichlorobenzeni	50000	ND	9.7	ND .	14	ND .	19	ND 10	- 11
,2-Dibromo-3-Chloropropani	June	ND ND	9.7	ND ND		41	19	32	11
2.4-Trichlorobenzens	100000	ND ND	9.7		. 14	ND.	19	. ND.	11
	HUUUUU			ND	14	ND	19	ND.	- 11
,2,3-Trichtorobenzenc	0.000	ND	9.7	ND	14	ND _	. 19	. ND	11

Notes:

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TCL - Target Compound List
VOC = Volatile Organic Compounds
ug/kg = micrograms per kilograms
ND = Non detected value
J = The reported value is an estimate.
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K = The reported value may be biased high.

	Contract Contract	S-097-52	62 AAL	IS-098-50	71"001	IS-099-504	111001	S-100-50	1 001	S-101-525	2 001	S-102-2	627 DAT	S-103-12	112:001	E 104	213-001
Sample Number:	1	5-097-32 S-(S-096-30		S-039-303		S-100-30.		S-101-323		S-102-2		S-103-12			104
Sampling Location:	NUDEP					S-0		. S-1		So		Sc		Sc			oil
Matrix:	Seil	Sc		Sc													/kg
Units:	Camp	U.S		ug		197/		119/		ug/l		ug		10g/ 3/15/			/2012
Date Sampled:	Criscre	3/15/		3/15/		3/15/2		3/15/		3/15/2		3/15/					
Parameter	(tg/(g)	Result	RL	Result	RL	Result.	RL.	Result	RL.	Result	. RL	Result	RL	Result	RL	Result	RL
Dichlorodifinoromethane	All Car	NDI	6.4	ND	6.5	ND J	7	ND	10	ND	7.1	NDJ	21	NDJ	15	NDJ	8.8
Chloromethane		ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
Vinyi Chioride	10000	ND	6.4	ND	6.5	ND	7	ND.	.10	ND	7.1.	ND.	21	ND.	. 15	ND	8.8
Bromomethane	. 1000	ND I	6.4	ND I	6.5	NDJ	7	NDJ	10	NDJ	7.1	NDJ	21	NDJ	15	NDJ	8.8
Chloroethane		ND	6.4	ND	6.5	ND	7	ND	. 10	ND	7.1	ND	21	ND	15	ND	8.8
Trichlorofluoromethane	7.0	ND	6.4	ND	6.5	ND	.7	ND.	.10	ND	7.1	ND	21.	ND	15	ND	8.8
1,1-Dichloroethene	atrant.	ND	6.4	ND	6.5	ND	7	ND	10	ND	7.]	ND	21	ND	15	ND	8.8
1,1,2-Trichloro-1,2,2-Triffuoroethane	1000	ND	6.4	ND	6.5	ND	7	ND.	10	ND	7.1	ND	21	ND.	15	ND	8.8
Carbon Disulfide		ND	6.4	ND	6.5	ND	7.	_ND	10	ND .	7.1	_ ND_	21	ND.	15	ND.	8.8
Acetone	100000	73	.13	94	13	180	14	150	20	52	14	600	41	490	29	220	18
Methyl Acetate		ND	6.4	NDL	6.5	ND	7	NDL	10	ND L	7.1	ND	21	ND	15	ND	8.8
Methylene Chloride		ND.	6.4	ND.	.6.5	ND	7	ND	10	ND	.7.1	ND .	. 21.	ND.	. 15	ND	8.8
trans-1,2-Dichloroethene		ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
Methyl tert-Butyl Ether		ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
1,1-Dichloroethane	200	ND	6.4	.ND	. 6.5	ND	7.	ND	10	ND	7.1	ND	. 21	ND	15	ND.	8.8
cis-1,2-Dichtaroethene		ND	6.4	61	6.5	33	`7 ``	31	10	ND	7.1	ND	21	110	15	ND	8.8
2-Butanone	50000	ND	13	42	13	25	14	99	20	79	14	340	41	89	29	27	18
Bromochloromethane		ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND .	.15.	ND.	8.8_
Chloraform	1000	ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
1,1,1-Trichloroethane	50000	ND	6.4	ND	6.5	ND	7	ND	10	ND.	7.1	ND ·	21	ND	15	ND	8.8
Cyclohexane	2000	.ND	6.4	.ND	. 6.5.	ND.	7	ND.	. 10	. ND	7.1	ND.	21	ND.	. 15	ND	8.8
Carbon Tetrachloride	1000	ND'	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
Benzene	1000	ND	6.4	8	6.5	ND	7	ND	10	ND.	7.1	ND	21	ND	15	ND	8.8
1,2-Dichloroethane	1000	.ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND.	8.8
Trichloroethene	1000	ND	6.4	52	6.5	140	7	51	10	ND	7.1	ND	21	35	15	ND	8.8
1,2-Dichloropropane		ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND T	21	'ND'	15	ND	8.8
Bromodichioromethane		ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
cis-1,3-Dichloropropene		ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND.	21	. ND	15	ND	8.8
4-Methyl-2-Pentanione		ND	6.4	NĐ	13	ND J	14	ND	20	ND	7.1	NDJ	41	NDJ	29	ND	18
Toluene	500000	ND	6.4	ND	6.5	NDJ	7	ND	10	ND	7.1	ND J	21	NDJ	15	ND.	8.8
trans-1,3-Dichleropropene	A0450	ND.	6.4	ND.	6.5	ND	7	ND.	10.	ND.	7.1.	ND.	. 21	ND .	15	ND.	8.8.
1,1,2-Trichioroethane	1000	NĐ	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
Tetrachloroethene		ND	6.4	ND	6.5	NDJ	7	ND	10	ND	7.1	ND.J	21	NDJ	15	ND	. 8.8
Methylcyclohexane		ND.	6.4	ND	6.5	ND	7.	ND	10.	.ND.	7.1	ND	. 21	.ND	.15	ND	8.8
Dibromochloromethane	285	ND	6.4	ND	6.5	ND	7	ND	10	ND	7.1	ND	21	ND	15	ND	8.8
1,2-Dibromoethane	7.7.X	ΝĎ	6,4	ND	6.5	NDI	7	ND	10	ND	7.1	NDJ	21	NDJ	15	ND	8.8
2-Hexanone	G. J.Z.	ND	6.4	ND	13	ГÜИ	14	ND	20	ND	14	NDJ	21	NDJ	29	ND	18
Chlorobenzene	1000	ND	6.4	ND	6.5	NDJ	7	ND	10	ND	7.1	NDJ	21	NDJ	15	ND	8.8
Ethylbenzene	2777773	ND	6.4	ND	6.5	NDJ	7	ND	10	ND	7.1	NDI	21	NDJ	15	ND	8.8
m/p-Xylene	MICE.	ND	.6.4	ND.	. 6.5	NDJ	7.	.ND	10	ND	7.1	.ND J	. 21	NDJ	15	ND	8.8
o-Xylene		ND	6.4	ND	6.5	NDJ	7	, ND	10	ND	7.1	ND J	21	NDJ	15	МD	8.8
Styrene	201827	ND	6.4	ND	6.5	NDJ	7	ND	10	ND	7.1	ND J	21	NDJ	15	ND	8.8
Bromeferm.	1000	ND	6.4	ND.	6.5	ND	7.	ND	. 10	. ND.	7.1	.ND	.21	.ND	15	ND	8.8
lsopropylbenzene	N. 54.3.2003	ND	6.4	ND	6.5	NDJ	7	ND ~	10	ND	7.1	NDI	`21'	NDJ	15	ND	8.8
1,1,2,2-Tetrachloroethane	1000	ND	6.4	ND .	6.5	NDJ)	ND	10	ND	7.1	NDJ	21	NDJ	15	ND	8.8
1,3-Dichlorobenzene	100000	_ND	6.4	NDJ.	6.5	. ND J		20 J	10	.ND	7.1	ND J	21	NDJ	15	ND	8.8
1,4-Dichlorobenzene	100000	ND	6.4	18	6.5	13	7	36	10	11	7.1	ND J	21	ND'J	15	ND	8.8
1,2-Dichlorobenzene	50000	ND	6.4	45	6.5	28	. 7	. 79	10	17	7.1	ND J	21	NDJ	15	ND	8.8
1,2-Dibromo-3-Chloropropane	10000	ND	6.4	ND	6.5	ND)	7.	ND	10.	ND	7.1	NDJ	21	ND.J	.15	ND	8.8
1,2,4-Trichlorobenzene	100000	ND	6.4	ND	6.5	NDJ	7	29	10	ND	7.1	NDJ	21	NDJ	15	ND	8.8
1.2.3-Trichlorobenzene	100000	ND	6.4	ND	6.5	NDJ		15	10	- ND	7.1	ND J	21	NDJ	15	ND	8.8

Notes:

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ug/kg = micrograms per kilograms

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			`														
Sample Number:		S-104-1	213-002	S-105-0	0607-001	S-106-2	425-001	\$-107-1	617-001	S-108-0	607-001	S-109-2	425-001	S-110-	2627-001	S-111-2	930-001
Sampling Location:		S-	104	S	105	S	106		107	S-	108	S-	109	5-	110		111
	NIDEP	S	oil .	S	oil	S	oil	S	oil	S	oil	S	oil	5	oil	S	oil .
Unitis	Soi Cleanus	108	/kg	· uş	/kg	TO O	/kg	129	/kg	ug	/kg	'ug	/kg	ių.	/kg	TU,	/kg
Date Sampled:	Criteria	3/15	/2012	3/15	/2012	3/15/	2012	3/15	/2012	3/15	2012	3/15/	2012	3/15	/2012	3/15	/2012
Parameter	(mg/kgt)	Result	RL	Result	R1.	Result	RL	Result	RL	Result	RL	Result	RL	Result.	RL	Result	RL
Dicklorodiffuoromethane .		ND	7.2	ND	7.3	ND.	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND.	6.5
Chloromethane		ND.	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Vinyl Chloride	10000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Bromomethane	1000	NDJ	7.2	NDJ	7.3	NDJ	5.6	NDI	18	NDJ	5.9	NDJ	7.4	NDJ	7.4	NDJ	6.5
Chloroethane	12.4	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Trichiorofinoromethane	(*.CX **)	ND	7.2	ND	7.3	ND	5.6	ND	18	ND .	5.9	.ND.	7.4	ND	7.4	ND	6.5
1,1-Dichloroethene	year on one	ND	7.2	ND	7.3	ND	5.6	'ND'	18	'ND'	5.9	ND	7.4	ND	7:4	ND	6.5
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Carbon Disulfide		ND	7.2 、	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Acetone	100000	270 J	. 14	92	. 15	140 J	11	620	36	140 J	12	210 J	15	180	15	100 J	13
Methyl Acetate	100	NDL	7.2	NDL	7.3	NDL	5.6	NDL	18	NDL	5.9	NDL	7.4	NDL	7.4	NDL	6.5
Methylene Chloride	3.00	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
trans-1,2-Dichinroethene	dandhi kat	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Methyl tert-Butyl Ether	<i>[</i>]	ND	7.2	ND	7.3	ND	5.6	ND	18	ND.	5.9	ND	7.4	ND	7.4	ND	6.5
1,1-Dichloroethane cis-1,2-Dichloroethene	42.364	ND ND	7.2	ND ND	7.3	ND ND	5.6	ND ND	18	ND ND	5.9 5.9	ND	7.4	ND ND	7.4	. ND	6.5
	#0000	39	14	45	15	14	3.0	150	36	18	12	16	15	26	15	ND ND	13
2-Butanone Bromochleromethane	50000	ND	7.2	ND	7.3	ND ND	5.6	ND	18	ND	5.9	ND	7.4	ND.	7.4	ND	6.5
Chloroform	1000	ND	7.2	ND	7.3	ND ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND ND	6.5
Ll.1-Trichioroethane	50000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND ND	7.4	ND	7.4	ND	6.5
Cyclohexane	30000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4.	ND	7.4	ND	6.5
Carbon Tetrachloride	1000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Benzene	1000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
1,2-Dichioroethane	1000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND.	. 5.9	ND	7.4	ND	7.4	ND .	6.5
Trichloroethene	1000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
1,2-Dichloropropane		ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Bromodichioromethane	Sa	ND	7.2	ND	7.3	ND	5.6	ND.	18	ND	5.9	ND.	7.4	ND	7.4	ND	6.5
cis-1,3-Dichloropropene	45.25	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	2.4	ND	7.4	ND	6.5
4-Methyl-2-Pentanone		ND	14	ND	7.3	ND	11	ND	36	ND ·	12	ND	7.4	ND	15	.ND	6.5
Toluene	500000	ND	7.2	ND	7.3	ND	5.6:	ND	18	ND	.5.9	ND	7.4.	ND	7.4.	ND	6.5
trans-1,3-Dichloropropene	A 35	ND	7.2	ND	7.3	ND	5.6	ND	18	- ND	5.9	ND	7.4	ND	7.4	ND	6.5
1.1.2-Trichloroethane	1000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Tetrachloroethene	45.00	ND	7.2	ND	7.3	ND	5.6.	ND	18	ND	5.9	Q.	7.4	ND	7.4	ND.	6.5
Methylcyclohexane	2.0x.0	ND	7.2	ND	7.3	ND	5.6	'ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Dibromochloromethane		ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
1,2-Dibromoethane	2.25	ND	7.2	ND	7.3	ND.	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
2-Hexanone		ND	14	ND	7.3	8	11	ND	36	ND	12	ND	7.4	ND	15	ND	6.5
Chlorobenzene	_1000	ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
Ethylbenzene		ND	7.2	ND	7.3	ND	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
m/p-Xylene	Sec. 35	ND	7.2	ND	7.3	ND	5.6	ND.	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
o-Xytene	124	ND	7.2	ND	7.3	ND	5.6	ND	18	ND.	5.9	ND	7.4	ND	7.4	ND	6.5
Styrene	2.132.73	ND	7.2	ND	7.3	ND	5.6	ND	18	ND.	5.9	ND	7.4	ND .	7.4	ND	6.5
Bromoform	1000	ND	7.2	ND	7.3	ND	5.6	ND ND	18	ND ND	5.9 5.9	ND ND	7.4	ND ND	7.4	ND ND	6.5
Isopropylbenzene	1000	ND	7.2	ND	7.3	ND	5.6			ND ND	5.9	ND ND	7.4	ND	7.4	ND ND	6.5
1,1,2,2-Tetrachioroethane	1000	ND J	7.2	ND	7.3	ND I	5.6. 5.6	ND I	18	ND	5.9	ND J	7.4	NDI	7.4	NDI	6.5
1,3-Dichlerobenzene 1.4-Dichlerobenzene	100000	ND	7.2	ND	7.3	נטא	5.6	ND LUN	18	ND toy	5.9	ND	7.4	ND	7.4	ND	6.5
1,2-Dichlorobenzene	100000 50000	ND	7.2	ND.	73	QZ QZ	5.6	ND ND	18	ND ND	5.9	ND ND	7.4	ND	7.4	ND	6.5
1,2-Dibrome-3-Chloropropane		ND	7.2	ND.	7.3	ND	5.6	ND ND	18	ND	5.9	ND	7.4	ND.	7.4	ND	6.5
1,2-thoromo-3-thioropropane 1,2,4-Trichlorobenzene	100000	ND	7.2	ND.	7.3	ND DX	5.6	ND	18	ND	5.9	ND	7.4	ND	7.4	ND	6.5
1,2,3-Trichkorobenzene	240000	ND.	7.2	ND	7.3	ND	5.6	ND ND	18	ND ND	5.9	ND	7.4	ND	7.4	ND	6.5
App- consult UNCHACHE	are mercian	174	1.4	1757	1	170	7.0	,,,,,,			4.7	***					

Notes:

RL = Reporting Limit

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ug/kg = micrograms per kilograms

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	Avenue							S-115-36	22.001	S-116-01	02.001	S-116-0	00 000	S-117-02	103 001	C 119 A	203-001
Sample Number:		S-112-1		S-113-1		S-114-2		S-115-30 S-1		S-116-01		S-116-0		5-11/-02 S-1			118
Sampling Location:		S-1		S-1		S-1		5-1 So		So		Sc		So			oil
Matrix:	NIDER		oil .	S								119/		110/			/kg
Units:	Cleanup		kg	ug		ug		3/15/		3/16/		3/16/		3/16/			2012
Date Sampled:	Centeria	3/15/		3/15/		3/15/				Result		Result	RL	Result	RL RL	Result	RL
Parameter	(09/kg)	Result.	RL .	Result	RL	Result	RL	Result	RL		RL		7	ND	6.3	ND	69
Dichlorodifluoromethane		'ND	8.3	ND	8.8	ND	7.7.	ND .	5.2	ND	5.9	D (6.9
Chloromethane		ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	
Vinyi Chloride	10000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Bromomethane	1000	NDJ	B.3	I DN	8.8	NDJ	. 7.7.	ND I	5.2	NDJ	5.9	ГДИ	1.	NDJ	6.3	NDI	6.9
Chloroethane		ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND.	. 7	ND	. 6.3	ND	6.9
Trichiorofluoromethane		NĐ	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,1-Dichloroethene		ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Carbon Disnifide	2000	מא	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Acetone	100000	250	17	130	18	. 99	.15. (200 J	10.	200 J	12	210 J	14	130 J	13	74	14
Methyl Acetate		ND L	8.3	ND	8.8	ND	7.7	NDL	5.2	NDL	5.9	NDL	- 7.	NDL	6.3	NDL	6.9
Methylene Chloride	FF 4.12.1	.ND.	8.3	ND	8.8	ND	7,7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
trans-1,2-Dichloroethene	14.000	ND	8.3	ND	8.8	ND	. 7.7	ND	5.2	ND	5.9-	ND	7	ND	6.3	ND	6.9
Methyl tert-Butyl Ether	44.02%	ND.	8.3	NDL	8.8	NDL	7.7	ND	5.2	ND	5.9	ND	. 7.	. ND	6.3	ND	6.9
1,1-Dichloroethane	EXECUTE:	ND	- 8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	. ND	7	ND	6.3	ND	6.9
cis-1,2-Dichloroethene		ND	8.3	ND.	8.8	ND	7.7	.ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
2-Butanone	50000	34	8.3	37	~ 18	21	7.7	ND	10	47	12	19	14.	14	13	25	14
Bromochloromethane	17.4	ND	8.3	ND	8.8	ND	7.7	ND.	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Chloroform	1000	ND	8.3	ND	8.8	ND	7.7	.ND.	5.2	. ND	5.9	ND	7	ND	6.3	ND	6.9
1,1,1-Trichloroethane	50000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Cyclobexane	Di Lia	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND.	7	ND	6.3	ND	6.9
Carbon Tetrachloride	1000	ND	8.3	ND	8.8	ND.	7.7	.ND.	5.2	ND	5.9	ND	7	NO	6.3	ND	6.9
Benzene	1000	ND	8.3	-ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND.	6.9
1.2-Dichlaroethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Trichloroethene	1000	ND	8.3.	.ND.	8.8.	ND	7.7	ND	5.2	ND	5.9	ND ·	7	ND	6.3	ND	6.9
1,2-Dichloropropane		ND .	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	.6.3	ND	6.9
Bromodichioromethane	300	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
cis-1,3-Dichioropropene	e Carrie	ND	8.3	ND	. 8.8.	ND	7.7.	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
4-Methyl-2-Pentanone		ND	17	ND	18	ND	15	ND	10	NDJ	12.	ND	14.	ND	6.3	ND	6.9
Toluene	500000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7	ND	6.3	ND	6.9
frans-1,3-Dichloropropene	30000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	 	ND	6.3	ND	6.9
1.1.2-Trichloroethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND.	7 .	ND	6.3	ND	6.9
Tetrachloroethene	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	NDI	5.9	ND	7	ND	6.3	ND	6.9
Methylcyclohexane		ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Dibromechloromethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND.	6.3	ND	6.9
1.2-Dibromoethane		ND	8.3	ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7	ND	6.3	ND	6.9
2-Hexanone		ND	17	ND	18	ND	7.7	ND	10	NDJ	12	ND	14	ND	6.3	ND	6.9
Chkrobenzene	0001	ND	8.3	ND	8.8	ND	.7.7 .	ND	5.2	ND J	5.9	ND	7	ND	6.3	ND	6.9
Ethylbenzene	1000	ND ND	8.3	-ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	- 7	ND	6.3	ND	6.9
m/p-Xylene		ND	8.3	ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7	ND	6.3	ND	6.9
n-Aytene		ND ND	8.3	ND.	8.8	ND	7.7	ND	5.2	ND1.	5.9	ND	+ +	ND	6.3	ND	6.9
Styrene	+	ND	8.3	ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7	ND	6.3	ND	6.9
Bromoform	1000	ND.	8.3	ND	8.8	ND	7.7	ND ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
	1000	ND ND	8.3	, ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7	ND	6.3	ND	6.9
Isopropyibenzene	0001	ND ND	8.3	ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7.	ND	6.3.	ND	6.9
1,1,2,2-Tetrachloroethane	100000	NDJ	8.3	ND	8.8	ND	7.7	NDJ	5.2	NDI	5.9	I DD I	7	NDI	6.3	NDI	6.9
1,3-Dichiorobenzene	100000		8.3	ND ND	8.8	ND	7.7	ND	5.2	NDI	5.9	ND	1 /	ND	6.3	נתא	6.9
1,4-Dichlorobenzene		_ ND			8.8	ND	7.7	ND ND	5.2	NDI	5.9	ND ND	7	ND.	6.3	ND ND	6.9
1,2-Dichlorobenzene	50000	ND	8.3	ND									7	ND		ND	6.9
1,2-Dibrome-3-Chloropropane	100000	ND.	8.3	. ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7	ND ND	6.3	ND ND	
1,2,4-Trichlorobenzene	100000	ND	8.3	ND.	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND			6.3		6.9
1,2,3-Trichlorobenzene	2835 387	ND	8.3	ND	8.8	ND	7.7	ND	5.2	NDJ	5.9	ND	7.	ND	6.3	ND	6.9

Notes:

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ug/kg = micrograms per kilograms

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	0.000 100 0.000		402.00	T 0 100	11:							1 2		,			
Sample Number:	100		203-001		203-001	S-121-0			203-001	5-123-0			1203-001	S-125-0			203-001
Sampling Location:	NIDEP		115		120	<u> </u>			122		123		124		25		126
Matrix:	NIDEP Soil		oil		oil		oil		oil		oil		oil		oil		oil
Units:	Cleaning		/kg		/kg		/kg		/kg		/kg		√kg		/kg		/kg
Date Sampled:	Criteria		2012		/2012		2012		/2012		2012		/2012		2012		/2012
	(ug/kg)	Result	RL	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	(A)	ND.	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Chloromethane	86. 7.76	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Vluyi Chloride	10000	ND	6	ND	7	ND.	7.1	ND	6.7	ND	9.7.	ND	5.8	NĐ	7.9	ND	6.9
Bromomethane	1000	ND1	6	NDJ	7	NDJ	7.1	NDJ	6.7	NDJ	9.7	NDJ	5.8	NDJ	7.9	NDJ	6.9
Chloroethane		ND	6	ND	7	ND	7.1	\ ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Trichlorofluoromethane		ND	6	ND	7	ND	7.1	ND	. 6.7	NĐ	9.7	ND	5.8	ND	7.9	ND	6.9
1,1-Dichloroethene	materia:	ND	.6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	_ 'Q	∴ 7.9	ND	6.9
1,1,2-Trichioro-1,2,2-Trifluoroethane	1000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Carbon Disuffide	30.00	ND	6	ND	7	ND	· 7.1	ND	6.7	.ND	9.7	ND	5.8	ND	7.9	ND	6.9
Acetone	100000	160 J	6	160	. 14	280 J	14	48	13	93	19	150	12	300	16	220	14
Methyl Acetate		NDL	6	ND	7	NDL	7.1	ND	6.7	ND	9.7	ND	5.B	ND	7.9	ND	6.9
Methylene Chloride	377.3	ND	. 6	ND	7	ND	7.1	ND .	6.7	.ND	9.7	ND	5.8	ND	7.9	ND	6.9
trans-1,2-Dichloroethene	C/98 (*)	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Methyl tert-Butyl Ether	G. 1.	ND	6	NDL	7	ND	7.1	ND	6.7	ND	9.7	NDL	5.8	NDL	7.9	NDL	6.9 .
1,1-Dichloroethane		ND	6	ND	. 7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
cis-1,2-Dichloroethene	18 July 18	ND	6	ND	'7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	57	7.9	ND.	6.9
2-Butanone	50000	13	12	ND	. 14	29	14	ND:	13'	ND	19	1.3	12	29	16	29	14
Bromochioromethane	1	ND	6	ND.	7.	ND.	7.1.	ND.	6.7	ND.	9.7	ND	5.8	ND	7.9	ND	6.9
Chioroform	1000	ND	6	ND	7	ND	7:1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
1,1,1-Trichloroethane	50000	ND	6	ND	7	ND .	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Cyclohexane	7	ND	6.	ND.	7	ND	7.1.	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Carbon Tetrachloride	1000	ND	6	ND	7	ND	7:1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	69
Benzene	1000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.B	ND	7.9	ND	6.9
1,2-Dichloroethane	1000	ND.	6	ND	7	ND	.7.1	ND	6.7	. ND	9.7	. ND	5.8	ND	7.9	ND	6.9
Trichloroethene	1000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	15	5.8	31	7.9	ND	6.9
1,2-Dichloropropane	33.	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Bromodichioromethane .	7	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	_5.8	ND	7.9	ND	6.9
cis-1,3-Dichloropropene		. ND	6	.ND	7	ND.	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
4-Methyl-2-Pentanone	# 3.7.3	ND	12	ND	14	ND	14	ND	13	ND	19	ND	12	ND	16	ND	14
Toluene	500000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	. ND.	5.8	ND	7.9.	ND	6.9
trans-1,3-Dichioropropene	Ste how	ND	6.	ND .	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
1,1,2-Trichioroethane	1000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	В	5.8	ND	7.9	ND	6.9
Tetrachloroethene		ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	.7.9	ND .	6.9
Methylcyclohexane.	2	ND	6	ND	7	ND	7.1	· ND	6.7	ND	. 9.7	ND	5.8	ND	7.9	ND	6.9
Dibromochloromethane	255 - 1 61	ND	6	ND	7	ND	7.1	В	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
1,2-Dibromoethane	M. 5.	ND	6	ND	7	ND	7.I	ND	6.7	ND	9.7	ND	5.8	ND .	7.9	ND	6.9
2-Hexanone	181. S.	.ND	12	.ND.	. 14.	ND	14	ND	13	ND	19	ND	12	ND	16	ND	14
Chlorobenzene	1000	ND	6	ND	7	ND	7.1	'ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Ethylbenzene		ND	6	ND	7	ND	7,1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
m/p-Xytene		ND	6	.ND	7.	NĐ	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
o-Xylene	Naji ya 18	ND	6	"ND	7	ND.	7.1	ND	6.7	ND.	9.7	ND	5.8	ND	7.9	ND	6.9
Styrene .		ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Bromoform	1000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
Isopropyibenzene	hr -0.00	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
1,1,2,2-Tetrachioroethane	1000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
	100000	ND.	6	.ND	7.	NDJ	.7.1	NDJ	6.7	NDJ	9.7	ND	.5.8	ND	7.9	ND	6.9
	100000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND ·	5.8	ND	7.9	ND	6.9
	50000	ND.	6	ND.	7	ND	7.1	ND.	6.7	ND.	9.7	ND.	5.8	ND	7.9	ND	6.9
1.2-Dibromo-3-Chioropropane		ND	6.	ND	7	ND	7.1	. ND	.6.7	ND	9.7	ND	5.8	ND	7.9	.ND	6.9
	100000	ND	6	ND	7	ND	7.1	ND	6.7	ND	9.7	ND	5.8	ND	7.9	ND	6.9
1.2.3-Trichlorobenzene		ND.	6 \	ND	7	ND.	7.1	ND ND	6.7	ND ND	9.7	ND.	5.8	ND	7.9	ND	6.9

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Sample Number:	1000	S-127-0			203-001	S-129-3		S-130-3		S-131-22			041-001		213-001 .		809-001
Sampling Location:		S-		S-1		S-1			128	S-1		S-1		S-1		S-1	
Matrix:	NIDEP		oil		xil		xil		oil	So		Sc		54			oil
Units:	Soil		/kg	ug			/kg .		/kg	ug/				ug			/kg
Date Sampled:	Cesteria		2012		2012		2012		2012	3/16/		3/16/		3/16/			2012
arameter	(Why)	Result	RL	Result	RI.	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	Ri.
lchlorodiffuoromethane		ND.	. 6	ND .	.6.1	ND	6.4	.ND J	5.4	ND	6.6.	ND.	6.2	. ND	7.4	.ND.	7.9
hloromethane		פֿאַ	. 6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
/inyl Chloride	10000	ND	6	ND	6.1	ŊD	6.4	ND	5.4	ND	6.6	ND.	6.2	ND	7.4	ND	7.9
romomethane .	1000	ND J	_6.	ND.J.	.6.1.	ND J.	6.4.	ND J	5.4	NDJ	6.6:	ND J	6.2	. ND.J.	7.4	NDI	7.9
Chloroethane		ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
[richlorofluoromethane		ND	6	ND	.6.1	ND	6.4	ND	5.4	ND .	6.6	ND	6.2	ND	7.4	ND	7.9
,1-Dichloroethene		ND.	. 6.	.ND	6.1	. ND	6.4	ND	5.4	ND	6.6	. ND.	6.2	ND	7.4	. ND	7.9
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Carbon Disuifide		. ND	6	ND	.6.1	ND	6.4	ND.	5.4	ND	6.6	7.4	6.2	ND	7.4	ND	7.9
Acetone		. 84	. 12	32	12	87	13	.33	.11	140	. 13	120	.12	.130	.15	140	16
Methyl Acetate		ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Methylene Chloride		ND	6	NĐ	6.1	ND	6.4	ND.	5.4	ND.	6.6	ND	6.2	ND	7.4	ND	7.9
trans-1,2-Dichloroethene		ND	6	ND	6.1	45	6.4	ND	5.4	ND_	6.6	ND.	6.2	.ND.	7.4	NĐ	7.9
Mothyl tert-Butyl Ether		ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
1,1-Dichloroethane		ND	6	ND	6.1	28	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
cis-1,2-Dichloroethene		51	. 6	61	6.1	3500	6.4	25	5.4	Z60	6.6	470	6.2	100	.7.4	ND	7.9
2-Butanone		ND	12	ND	6.1	15	13	ND	11	. 16	13	23	12	ND	15	22	16
Bromochloromethane		ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	. 7.9
Chloroform	1000	ND	6	` ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND.	7.4	ND	. 7.9
1,1,1-Trichloroethane	50000	ND	-6	. ND	6.1	14	6.4	ND	5.4	ND	6,6	ND	6.2	ND	7.4	ND	7.9
Cyclohexane		ND	6	ND	6.1	ND	6.4	ND.	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Carbon Tetrachloride	1000	ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Benzene	1000	ND	. 6	ND	. 6.1	ND	6.4	ND	5.4	ND.	6.6	ND	6.2	ND	7.4	ND	7.9
1,2-Dichloroethane		ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ΝD	7.9
Trichloroethene .	1000	18	6	12	6.1	6600	6.4	10	5.4	190	6.6	250	6.2	40	7.4	12	7.9
,2-Dichleropropane.		.ND	6	ND	6.1	ND	6,4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Bromodichloromethane	100	ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
cis-1,3-Dichloropropene		ND	6.	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
4-Methyl-2-Pentanone		.ND	. 12	ND	.12	ND	13	ND	11	ND	13	ND.	12	ND	15	. ND	7.9
Toluene	500000	ND	6	ND.	6.1	44	6.4	ND	5.4	13	6.6	24	6.2	ND	7.4	ND	7.9
trans-1_3-Dichteropropene	20.000	ND	6	ND	6.1	ND	6.4	ND.	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
1,1,2-Trichloroethane	1000	ND.	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Tetrachforoethene		ND	6	ND	6.1	37	6.4	'ND	5.4	ND	6.6	9.3	6.2	ND	7.4	ND	7.9
Methylcyclohexane		ND.	6	ND.	6.1	ND	16.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Dibromochloromethane		.ND.	.6.	ND	. 6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
1,2-Dibromoethane		ND	6	ND	6.1	ND	6.4	ND	5,4	ND	6.6	ND.	6.2	ND	7.4	ND	7.9
2-Hexanone		ND	12	ND	12	ND	13	ND	- 11	ND	13	ND	12	ND	. 15	ND	16
Chlorobenzene	1000	_ND	6	. ND	6.1	8.7	6.4	ND	5.4	ND.	6.6	ND	6.2	ND	7.4	ND	7.9
Ethylbenzene		ND	6	ND	6.1	25	6.4	ND	5.4	ND	6.6	7.6	6.2	ND	7.4	ND	7.9
m/p-Xylene		ND.	6	ND	6.1	9.6	6.4	ND.	5.4	ND	6.6	22	6.2	ND	7.4	ND	7.9
-Xylene		ND	6	ND	6.1	200	6.4	.ND.	5.4	14	6.6	49	6.2	ND	7.4	ND	7.9
Styrene		ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
Bromoferm "	1000	' ND	6	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
sopropylbenzene		ND	6	ND	6.1	63	6.4	ND.	5.4	ND	.6.6	15	6.2	ND	7.4	ND	7.9
,1,2,2-Tetrachioroethane	1000	ND.	6.	ND	6.1	ND	6.4	ND	5.4	ND	6.6	ND	6.2	ND	7.4	ND	7.9
3-Dichlorobenzene		NDJ	6	NDJ	6.1	32 J	6.4	ND	5.4	NDJ	6.6	70.1	6.2	ND J	7.4	NDJ	7.9
.4-Dichlorobenzene		ND.	6.	ND	6.1	1100	6.4	ND	5.4	27	6.6	.340	6.2	_ ND	7.4	.ND	7.9
.2-Dichlorobenzene		ND	6	ND	6.1	150	6.4	ND	5.4	16	6.6	180	6.2	ND ND	7.4	ND	7.9
,2-Dibrome-3-Chloropropane		ND	6	ND	6.1	ND	6.4	ND	5.4	ND ND	6.6	ND ND	6.2	ND	7.4	ND	7.9
.2,4-Trichlorobenzene		ND	6	ND	6.1	38	6.4	ND	5.4	ND ND	6.6	76	6.2	ND	7.4	ND	7.9
1.2.3-Trichlorobenzene		ND	6	ND	6.1	ND	6.4	ND	5.4	ND ND	6.6	32	6.2	ND ND	7.4	ND ND	7.9

Notes:

RL = Reporting Limit

TCL = Target Compound List

VCC = Volatile Organic Compounds

ug/kg = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low.

K = The reported value may be biased high.

[O	Ten company and	S-135-0	202 001
Sample Number:			
Sampling Location:	NUDER		35
Matrix:	Soil		xil
Units:	Cleanup Criteria		/kg
Date Sampled:			2012
Parameter	(ug/kg)	Result	RL
Dichlorodifinoromethane		ХD	9.2
Chloromethane		ND	9.2
Vinyi Chloride	10000	ND	9.2
Bromomethane	1000	ND J.	9.2
Chloroethane		ND	9.2
Trichlorofluoromethane		ND	9.2
1,1-Dichloroethene		ND	9.2
1,1,2-Trichloro-1,2,2-Triffuoroethane	1000	ND	9.2
Carbon Disulfide		ND	9.2
Acetone	. 100000	.640	18
Methyl Acetate		ND	9.2
Methylene Chloride		ND	9.2
trans-1,2-Dichloroethene		ND	9.2
Methyl tert-Butyl Ether	25,7700	ND	9.2
1,1-Dichloroethane		ND,	9.2
cis-1,2-Dichloroethene		100	9.2
2-Butanone	50000	66	18
Bromochloromethane	23.63	ND	9.2
Chloroform	1000	ND	9.2
1,1,1-Trichloroethane	50000	ND	9.2
Cyclohexane	SZU	ND	9.2
Carbon Tetrachioride	1000	ND	9.2
Benzene	1000	ND	9.2
1,2-Dichtoroethane	1000	ND	9.2
Trichloroethene	1000	41	9.2
1,2-Dichloropropane	0.00	ND	9.2
Bromodichloromethane	75000	ND	9.2
cis-1,3-Dichloropropene	9400	ND	9.2
4-Methyl-2-Pentanone	2.7.000	NDJ	18
Toluene	500000	15	9.2
frans-1,3-Dichleropropene	12.5	ND	9.2
1,1,2-Trichloroethane	1000	ND	9.2
Tetrachioroethene		ND J	9.2
Methylcyclohexane	10000	ďΧ	9.2
Dibromochloromethane		ND	9.2
1,2-Dibromocthane		NDJ	9.2
2-Hexanone		NDJ	18
Chlorobenzene	0001	NDJ	9.2
Ethylbenzone	4,100	NDJ	9.2
m/p-Xylene		37	9.2
o-Xylene		54	9.2
Styrene		NDJ	9.2
Bromoform	. T000	ND	9.2
Isopropylbenzene		ND J	9.2
1,1,2,2-Tetrachloroethane	1000	NDJ	9.2
1,3-Dichlorobenzene	100000	NDJ	9.2
1,4-Dichlorobenzene	100000	160	9.2
1,2-Dichlorobeozene	50000	NDJ	9.2
1,2-Dihrome-3-Chioreprepane	- T	NDJ	9.2
1,2,4-Trichlorobenzene	100000	ND I	9.2
1,2,3-Trichiorobenzene	Same	ND J	9.2

Notes:

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	Cherry technical tracks	F-E-126 0	102.001		102.002		100-001-	0.120.0	100.001	1 0 120 0	102.001	0.1.00.0	100 001		100.001		100 001
Sample Number Sampling Location:			103-001 36	S-130-0	103-002	S-137-0			103-001	S-139-0			103-001	S-141-0		S-142-0	
Matrix:	NUDER					S-1		S-I		S-1				S-1			142
Units:	Seal		oil		oil	So			oil	St			oil .	S			lin
			/kg		/kg	ug/			/kg	110			/kg	ug/			/kg
Date Sampled:	Critoria		2012		2012	3/27/			2012	3/27/		3/27/		3/27/		3/27/	
Parameter	(ug/kg)	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethan		ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
Chloromethans		ND	6.8	ND	6.6	ND.	7.4	ND	7.3	ND.	7.2	ND.	. 6.1	ND	8.4	ND	7.8
Vinyl Chloride	10000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
Bromomethane	1000	NDJ	6.8	NDI	6.6	NDJ	7.4	NDJ	7.3	NDI	7.2.	NDJ	6.1	.NDJ	1	NDJ	7.8
Chloroethane	1561	ND	6.8	ND	6.6	ND.	7.4	ND	7.3	ND.	7.2	ND	6.1	ND	8.4	ND	7.8
Trichlorofluoromethan	120	. ND	. 6.8	ND	6.6	ND.	7.4	ND	7.3	ND	7.2	ND	6.1	ND.	8.4	ND	7.8
1,1-Dichloroethans	100	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND.	7.2	ND	6.1	ND	8,4	ND	7.8
1,1,2-Trichloro-1,2,2-Triffuoroetham	0001	ND	6.8	ND	6.6	ND	7.4	ND.	7.3	ND	7.2	ND CIN	6.1	ND	8.4	ND	7.8
Carbon Disulfida		ND	6.8	ND	6.6	ND	7.4	ND .	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
Acetone	100000	19	14.	ND	13.	50	15	54.	15	33	14	40	12	67	17	57	16
Methyl Acetate	3.1	ND ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND.	7.2	ND	6.1	ND	8.4	ND	7.8
Methylene Chlorida	CALL DATABLE OF THE		6.8	. ND.	. 6.6	ND	7.4	.ND.	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
trans-1,2-Dichloroethen		ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
Methyl tert-Butyl Ethe: 1,1-Dichloroethen:	2000 18	ND.J	6.8	ND J	6.6	I CDN	7.4	נמא	7.3	ND J	7.2	ND 1	6.1	NDJ	8.4	NDJ	7.8
cis-1,2-Dichloroethen	300	ND ND	6.8	ND	6.6	ND.	7.4	ND	7.3	ND	7.2	ND ND	6.1	ND	8.4	ND	7.8
2-Butanone	50000	ND ND	14	ND ND	6.6	ND ND	7.4	ND ND	7.3	ND	7.2	ND ND	6.1	ND	8.4	ND	7.8
Bromochloromethan:	20000	ND	6.8	ND ND		ND ND		ND					12	ND	17	ND	16
Chloroform	1000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND ND	7.2 7.2	ND ND	6.1	ND	8.4	ND	7.8
1,1,1-Trichloroethans	1000	ND ND	6.8	ND	6.6	ND ND	7.4	ND	7.3	ND	7.2		6.1	ND	8.4	ND	7.8
Cyclohexans	LONG TO SERVICE	ND ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND ND	7.2	ND ND	6.1	ND	8.4	ND	7.8
Carbon Tetrachlorida	1000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND ND	8.4	ND ND	7.8
Benzene	1000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	שא	6.1				7.8
1.2-Dichloroethanc	1000	ND	6.8	ND.	6.6	ND.	7.4	ND	7.3	ND ND	7.2	ND	6.1	ND ND	8.4	ND.	7.8
Trichloroethens	1000	ND	6.8	ND	6.6	ND ND	7.4	ND	7.3	32	7.2	ND	6.1	ND ND	8.4	ND.	7.8
1,2-Dichloropropant	1000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND ND			
Bromodichloromethan	200000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4 8.4	ND ND	7.8
cis-1,3-Dichloropropens	Sec. 11-18	ND.	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
4-Methyl-2-Pentanon	C2122428C	ND	14	ND	13	ND	15	ND.	15	ND	14	ND	12	ND ND	17	. ND.	16
Toluene	500000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND ND	-8.4	ND.	7.8
trans-1,3-Dichloropropens	0.76(75)	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND:	7.2	ND	6.1	ND	8.4	ND.	7.8
1,1,2-Trichloroethan	1900	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
Tetrachloroethens	27000000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND ND	7.8
Methylcyclohexani	2-12-17-17	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
Dibromochloromethan	800805	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND.	8.4	ND	7.8
1,2-Dibromoethand	2000000	ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND.	6.1	ND	8.4	ND	7.8
2-Hexanone	MMEG	ND	14	ND-	13	ND	15	ND.	15	. ND	14	ND	12	ND.	17	ND	16
Chlorobenzeni	1000	. ND .	6.8	,ND	. 6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	24	7.8
Ethylbenzene	Maria es	ND	6.8	ND	6.6	ND	7.4	. ND	7.3	ND	7.2	ND	6.1	. ND	. 8.4	ND	7.8
m/p-Xylene -	1000	ND.	6.8	ND	.6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
o-Xylene	2000	מא	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND.	8.4	.ND	.7.8.
Styrene	2464	ND	6.8	.ND	6.6	. ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	ND	7.8
Bromeform	1000	ND	6.8	ND	6.6	ND	7.4	. ND	7.3	ND	7.2	ND	6.1	.ND	8.4	.ND.	7.8.
Isopropylbenzena	*****	ND.	. 6.8	. ND	. 6.6	ND.	7.4	ND	7.3	ND.	7.2	ND	6.1	ND	8.4	ND	7.8
1,1,2,2-Tetrachloroethans	Z. L. Month	ND	6.8	ND	6.6	ND	7,4	ND	7.3.	ND	7.2	ND	6.1	ND	8.4	ND	7.8.
1,3-Dichlorobenzens	100000	NDJ	6.8	ND/J	6.6	NDJ	.7.4	ND J.	. 7.3	ND J.	7.2	NDI	6.1	NDJ	8.4	NDJ	7.8
1,4-Dichlorobenzen	100000	6.9	6.8	9.0	6.6	ND	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	98	7.8.
1,2-Dichlorobenzen:	50000	ND	6,8	8.6	6.6	ND	7.4	. 56	7.3	16	7.2	14	6.1	ND .	8.4	1800	290
1,2-Dibromo-3-Chloropropans		^ND	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	. ND	6.1	ND.	8.4	.ND	7.8
1,2,4-Trichlorobenzeni	100000	NDL	6.8	ND	6.6	ND.	7.4	ND	7.3	ND	7.2	ND	6.1	ND	8.4	23	7.8
1.2.3-Trichlorobenzens		NDL	6.8	ND	6.6	ND	7.4	ND	7.3	ND	7.2	ND.	6.1	ND.	8.4.	ND	7.8

Notes:

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L = The reported value may be biased low.

K = The reported value may be biased low.

Sample Number:	2005,000,000	C.143.0	103-001	S-144-0	103-001	S-145-0	103-001	S-146-0	103-001	S-147-0	103-001	S-148-0	103-001	S-149-0	103-001	S-150-0	103-001
Sampling Location:	\dashv	5-145-V		S-			145	S-1		S-1		S-1		S-1		S-I	
Matrix:	NUDER	S			oil		mil	Sc		So			oil	S	oil	S	oil
Units:	Smil		/kg		/kg	_	/kg	139/		ÜR			/kg	ug	-		/kg
Date Sampled:	Cleanup	3/27/			2012		2012	3/27/		3/27/		3/27/		3/27/		3/27/	
Parameter	Criteria (ug/lag)	Result	RL	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL	Result	RL.	Result	RL
Dichlorodifluoromethan	(48.87	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Chloromethan	10000	ND	6.9	ND	6.3	ND	6.6.	ND	7.4	ND.	6.9	ND	6.6	ND	6.2	ND	5.2
Vinyl Chlorida	10000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Bromomethani	1000	NDJ	6.9	NDJ	6.3	NDJ	6.6	NDI	7.4	NDJ	6.9	NDJ	6.6	NDJ	6.2	NDJ	5.2
Chlornethans	3000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Trichlorofluoromethan	-	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	. 6.2	ND	5.2
I.I-Dichloroethans		ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
1.1.2-Trichtoro-1.2.2-Triffnoroethans	1000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Carbon Disulfide	1.22.00	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Acetone	100000	43	14	44	13	43	13	62	15.	46	14	.57	13	62	12	18	10
Methyl Acetate	700000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Methylene Chloridi	37.00	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND.	6.6	ND	6.2	ND	5.2
trans-1,2-Dichloroethen	177	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Methýl tert-Butýl Ethei	25,221,222	NDJ	6.9	LDN	6.3	NDJ	6.6	NDJ	7.4	NDJ	6.9	NDI	. 66	NDJ	6.2	NDJ	5.2
1.1-Dichloroethent	1	ND	6.9	ND	6.3	ND	6.6	ND.	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
cis-1.2-Dichloroetheni	23.62	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND.	6.2	ND	5.2
2-Butanone	50000	ND	14	ND	13	ND	13	ND	15	ND	14	ND	13	ND	6.2	ND	10
Bromochloromethan	3.	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Chloroform	1000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
1,1,1-Trichloroethant		ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Cyclobexans	(30)	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Carbon Tetrachlorida	1000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	.5.2
Benzene	1000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	. ND	5.2
1.2-Dichloroethans	1000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND.	5.2
Trichloroethem	1000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
1.2-Dichloropropans	13.	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Bromodichloromethan	1,200, 143	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND.	6.6	ND	6.2	ND	5.2
cis-1,3-Dichloropropens	3000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
4-Methyl-2-Pentanom	2000	ND	14	ND	13	ND	.13	ND	15	ND	6.9	ND	13	ND	12	ND	10
Tolpene	500000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND .	5.2
truns-1,3-Dichloropropens	\$\$\$ (**) (t.e)	ND	6.9	ND	6.3	מא	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
1.1.2-Trichioroethan	1000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Tetrachloroethens	21000	ND	6.9	ND	6.3	ND	6.6.	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
Methylcyclohexani	38.1.X.*	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	.6.2	ND.	5.2
Dibromochloromethan	X4.00	ND	6.9	хD	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
1,2-Dibromoethanc	Man	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND.	.6.2	ND	5.2
2-Hexanone	200	ND	14	ND	13.	ND	13	ND	15	ND	14	ND	13	ND	12	ND	10
Chlorobenzens	1000	ND	6.9	ND.	6.3	13	6.6	ND	7.4	ND	6.9	ND	6.6	מא	.6.2	ND	5.2
Ethylbenzent	172772. #	ND	6.9	В	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
m/p-Xylene	Q2.11.05	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND	5.2
o-Xylene	828	ИD	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND ND	5.2 5.2
Styrene	ALXXX.	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND ND		ND	5.2
Bromoform	21000	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND.	6.2	ND ND	5.2
Isopropylbenzens	2888 W	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	ND	6.2	ND D	5.2
1,1,2,2-Tetrachloroetham	FRS. (29)	ND	6.9	ND	6.3	ND	. 6.6.	ND	7.4	ND I	6.9	ND J	6.6	NDI	6.2	NDJ	5.2
1,3-Dichlorobenzens	100000	NDJ	6.9	NDI	6.3	NDJ	6.6	NDJ	7.4	NDJ	6.9	ND	6.6	ND	6.2	ND,	5.2
1,4-Dichlorobenzen	100000	9.8	6.9	10	6.3	69	6.6	ND 12	7.4	ND ND	6.9	ND	6.6	ND.	6.2	ND ND	5.2
1,2-Dichlorobenzene	.50000	75	6.9	71	6.3	1800	300	12	7.4	ND		ND ND	6.6	ND.	6.2	ND	5.2
1,2-Dibromo-3-Chloropropum	77 (366)	ND	6.9	ND	6.3	ND	6.6	ND.	7.4	ND	6.9	ND		ND.	6.2	ND	5.2
1,2,4-Trichlorobenzeni	100000	ND	6.9	ND	6.3	19	6.6	ND	7.4	ND	6.9		6.6			ND	5.2
1,2,3-Trichlorobenzen	17.100	ND	6.9	ND	6.3	ND	6.6	ND	7.4	ND	6.9	ND	6.6	/ ND	6.2	עא	3.2

Notes:

RL = Reporting Limit

TCL = Target Compound List

VCC = Volatile Organic Compounds

ug/kg = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low.

K = The reported value may be biased high.

Sample Number	100	S-151-0	103-001	S-152-0	103-001	S-153-0	103-001	S-154-0	103-001	S-155-0	103-001
Sampling Location:	5.6354	S-I	51	S-1	52	S-1	153	S-I	154	S-1	155
Matrix:	NUDER	Se	pil	S	oil	· Se	oil	S	oil	S	oil
Units:	Soil	UZ	/kg	uź	/kg	uģ	/kg	ug	/kg	UZ	/kg
Date Sampled:	Criteria		2012		2012		2012		2012		2012
Parameter	(ug/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethan	-	ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND	5.8
Chloromethan		ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND .	5.8
Vinyl Chloride	10000	ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND	5.8
Bromomethans	1000	NDJ	6.0	NDJ	6.0	NDJ	5.5	NDJ	5.9	ND J	5.8
Chloroethans	6.00	ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND	5.8
Trichlorofluoromethan		ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND	5.8
1.1-Dichloroethans		ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND	5.8
1,1,2-Trichloro-1,2,2-Triffuoroethan	1000	. ND	6.0	ND .	6.0	ND	5.5	ND.	5.9	ND.	5.8.
Carbon Disulfide	1,7,0,4	ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND	5.8
Acctone	100000	38	12	84	12	80	11	. 57	12	40 J	12
Methyl Acetate	100000	ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND I	5.8
Methylene Chlorida		ND.	6.0	ND	_6.0	ND ND	.5.5	ND	5.9	ND	5.8
trans-1,2-Dichloroethens		ND	6.0	ND ND	6.0	ND ND	5.5	ND	5.9	ND ND	5.8
Methyl tert-Butyl Ether	5.77	ND.J.	6.0	NDJ	6.0	.ND J	5.5	ND J	5.9	ND	5.8
1.1-Dichloroethens	1.7.2	ND.	6.0	ND	6.0	ND ND	5.5	ND ND	5.9	ND	5.8
cis-1,2-Dichloroethem		_ND	6.0	ND ND	6.0	ND.	5.5	ND ND	5.9	ND	5.8
2-Butanone	50000	ND	12	ND ND	12	ND ND	11	ND ND	12	NDI	12
Bromochloromethan	20000	ND	- 6.0	ND.	6.0	ND.	5.5	ND.	5.9	ND	5.8
Chloraform	1000	ND	6.0	ND	6.0	ND.	5.5	ND.	5.9	ND ND	5.8
1.1.1-Trichloroethans	1000	ND.	.6.0	ND	6.0	ND ND	5.5	ND.			
Cyclohexans		ND.	6.0	ND	6.0	ND	5.5	ND.	5.9 5.9	ND	5.8
Carbon Tetrachlorida	1000	ND	6.0	ND	6.0	ND	.5.5	ND.	5.9	ND ND	5.8
Benzene	1000	ND	6.0	ND.	6.0	ND ND	5.5				5.8
1,2-Dichloroethan	31000		6.0	ND				ND.	5.9	ND	5.8
Trichloroethent	1000	ND ND	6.0	ND	6.0	ND.	5.5 5.5	ND ND	5.9 5.9	ND ND	5.8 5.8
1,2-Dichloropropans	1000	ND	6.0	ND	6.0	ND ND	5.5	ND	5.9	ND	
Bromodichloromethan	-	ND	6.0	ND	6.0	ND .	5.5	ND ND	5.9	ND ND	5.8 5.8
cis-1.3-Dichloropropens		ND	6.0	ND	6.0	ND	5.5	ND.	5.9		5.8.
4-Methyl-2-Pentanon	5,24100	ND	12	ND	12	ND	3.3	ND.	12	ND.	12
Toluene	500000	ND	6.0	ND	6.0	ND	5.5				
trans-1,3-Dichloropropens	300000	ND	6.0	ND	6.0	ND	5.5	ND	5.9 5.9	ND ND	5.8
1,1,2-Trichloroethans	1000	ND	6.0	ND	6.0	ND ND	5.5		5.9		
Tetrachloroethen	1000	ND	6.0	ND	6.0	ND ND	5.5	ND.	5.9	ND ND	5.8 5.8
Methylcyclohezani	5.532	ND	6.0	ND.	6.0	ND ND	5.5	ND ND	5.9	ND ND	
Dibromochloromethan	3.5m2833	ND	6.0	ND	6.0	ND ND	5.5	ND.	5.9	ND UND	5.8 5.8
1.2-Dibromoethan		ND	6.0	ND.	6.0	ND ND	5.5	ND	5.9	ND ND	5.8
2-Hexanone	35 338	ND	12	ND	12.0	ND ND	5.5				
Chlorobenzens	1000	ND	6.0	ND ND	6.0	ND ND	11	ND 13	5.9 5.9	ND ND	12
EthyVOCenzens	1000	ND	6.0	ND ND	6.0	ND ND	5.5	ND	5.9	ND ND	5.8
m/p-Xylene		ND	6.0	ND:	6.0	ND ND	5.5	ND.	5.9	ND	5.8 5.8
o-Xylene	75. 7	ND	6.0	ND.		ND ND					
Styrene	77807,04588	ND	6.0	ND ND	6.0	ND ND	5.5	ND ND	5.9 5.9	ND ND	5.8
Bromoform	1000	ND	6.0	ND ND	6.0	ND ND			5.9		5.8
IsopropýVOCenzene	1000	ND	6.0	ND ND	6.0	ND ND	5.5	ND		ND	5.8
1,1,2,2-Tetrachioroethans	E. S. Galler	ND ND	6.0	ND.			5.5	ND	5.9	ND	5.8
1.3-Dichlorobenzena	100000				6.0	ND	5.5	ND	5.9	ND	5.8
		ND J	6.0	ND J	6.0	ND J	5.5	ND J	5.9	ND	5.8
I,4-Dichlorobenzem	100000	ND	6.0	ND 20	6.0	8.4	5.5	57	5.9	ND	5.8
1,2-Dichlörobenzens	50000	ND.	6.0	20	6.0	.58.	5.5	6900	290	ND	5.8
1,2-Dibrome-3-Chloropropans	110000	ND	6.0	ND	6.0	ND	5.5	ND:	5.9	ND	5.8
1,2,4-Trichlorobenzen	100000	ND.	6.0	ND	6.0	ND	5.5	. 15	5.9	ND	5.8
I,2,3-Trichlorobenzens	1906-100	ND	6.0	ND	6.0	ND	5.5	ND	5.9	ND	5.8

Notes:

RL = Reporting Limit

TCL = Target Compound List

VOC = Volatili Organic Compounds

ug/kg = micrograms per kilograms

ND = Non descreted value

J = The reported value is an estimate.

L = The reported value may be biased low.

K = The reported value may be biased high.

Table 6, Dump Area D Trench 4 Analytical Summary TCL VOC Analysis - Mansfield Trail Dump March 28, 2012

Sample Number:		S-156-0		S-157-2			425-002		425-001		425-001	S-160-2	
Sampling Location:	NJDEP		56 50	S-1			157		58		159		160
Matrix:	Shift			Sc			oil		ril		oil		oil
Units: Date Sampled:	Cleanup Crisena		/kg 2012	3/28/	2012		/kg 2012		/kg 2012		/kg /2012		/kg // // // // // // // // // // // // //
Parameter Date Samples.	(altar)	Result	RL	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL
Dichlorodiffuoromethan		ND	7.6	ND	6.0	- ND	5.6	ND	6.4	ND	7.0	ND	7.4
Chloromethan		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Vinvi Chlorida	10000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	/ ND	7.0	ND	7.4
Bromomethan	1000	ND I	7.6	NDJ	6.0	NDJ	5.6	NDJ	6.4	NDJ	7.0	NDI	7.4
Chloroethans		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Trichlorofluoromethan:		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
1.1-Dichloroethene		ND	7.6	ND.	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
1,1,2-Trichloro-1,2,2-Triftuoroetham	1000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Carbon Disulfids		ND	7.6	ND	6.0	ND	5,6	ND	6.4	ND	7.0	ND	7.4
Acetone	100000	ND J	15	ND I	12.0	NDJ	11	21 J	13	32.5	14	99 J	15
Methyl Acetate	1 X 1 X 1	NDJ	7.6	ND J	6.0	NDJ	5.6	NDJ	6.4	ND1	7.0	NDJ	7.4
Methylene Chlorida		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
trans-1.2-Dichloroethens	100 e 11 e	ND .	7.6	ND	6.0	ND	5.6	ND	6.4.	ND.	7.0	.ND.	7.4
Methyl tert-Butyl Ether		NDJ	7.6	ND	6.0	NDJ	5.6	NDJ	6.4	ND I	7.0	NDI	7.4
1,1-Dichloroethans	9.4.7	ND	7.6	ND.	6.0	ND	5.6	ND	6.4	ND	7.0	ND.	74
cis-1,2-Dichloroethens		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
2-Butanone	50000	NDJ	15	ND J	12.0	NDJ	11	NDJ	13.	ND	14.0	NDJ	.15
Bromodichloromethan:	900	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND J	7.0	ND	7.4
Chloreform	1000	ND	7,6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4.
1,1,1-Trichloroethans	50000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Cyclohexant		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Carbon Tetrachlorids	1000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Benzene	1000	ND	7.6	ND	6.0	ND	5.6	ND	6,4	ND	7.0	ND.	74
1,2-Dichioroethans	1000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	-ND	7.4
Trichloroethene	1000	ND	7.6	ND	6.0	ND	5.6	ND.	6.4	ND	7.0	ND.	7.4
1,2-Dichloropropans		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Bromodichioromethan:	300	. ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND.	.74
cis-1,3-Dichloropropent	30.00	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
4-Methyl-2-Pentanon:		ND J	15	NDJ	12.0	ND	11	NDJ	13	NDJ.	14.0	NDJ	15
Toluene	500000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
trans-1,3-Dichloropropeni		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND.	7.0	ND	. 7.4
1,1,2-Trichloroethane	1000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Tetrachloroetheni		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND.	7.4
Methylcyclohexam		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Dibromochloromethan:		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND.	7.0	ND	7.4
1,2-Dibromoethan:	14.00	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
2-Hexanone		ND	15	ND	12.0	. ND .	11	ND_	. 13	ND	.14.0	ND	15
Chlorobenzene	1000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND.	7.0	ND	7.4
Ethylbenzeni		ND	7.6	ND	6.0	. ND	5.6	ND	.6.4	ND	7.0	ND	7.4
m/p-Xylene	idest.	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
o-Xylene		ND	7.6	ND	6.0	ND	5.6	ND_	6.4	ND.	7.0	ND	7.4
Styrene		ND	7.6	ND L	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
Bromoform	1000	ND	7.6	ND	6.0	ND	5.6	ND	. 6.4.	ND	7.0	ND	7.4
Isopropylbenzens	i see gi	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
1,1,2,2-Tetrachloroethant	1000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
1,3-Dichlorobenzent	100000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
1,4-Dichlorobenzens	100000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND.	7.0	ND	7.4
1;2-Dichlorobenzens	50000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND.	7.4
1,2-Dibromo-3-Chloropropans		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND.	7.0.	ND .	7.4
1;2,4-Trichlorobenzeni	100000	ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND	7.0	ND	7.4
1,2,3-Trichlorobenzens		ND	7.6	ND	6.0	ND	5.6	ND	6.4	ND.	. 7.0	.ND	7.4

Notes:

RL = Reporting Limit

TCL = Target Compound List

VOC = Volatile Organic Compounds

ug/kg = micrograms per kilograms

ND = Non detected value

J = The reported value is an estimate.

L = The reported value may be biased low.

K = The reported value may be biased bigh.

Table 6. Dump Area D Trench 4 Analytical Summary TCL VOC Analysis - Mansfeld Trail Dump March 28, 2012

Sample Number:	**************************************		617-001		637-001		637-001		637-001		637-001
Sampling Location	NUDEP		161.		i62		163 oil		164		165 oil
Matrix: Units:	Soft Cleamer		oil /kg		/kg		/kg		/kg		/kg
Date Sempled:	Criscia		2012		2012	3/28/	2012		/2012		/2012
arameter	(mg/kg)	Result	RL	Result	RL	Result	RL	Result	RL	Result	ŔL
Dichlorodifluoromethan .		ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
hloromethans	974233799	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
/inyl Chlorida	10000	ND	6.5	ND	7.2	ND	6.3.	ND	6.0	ND	6.0
Bromomethans	1000	ND J	6.5	NDJ	72.	NDJ	6.3	NDJ	6.0	ND J	6.0
hloroethane	× 7.	ND	6.5	ND	7.2	ZD.	6.3	ND	6.0	ND	6.0
richlorofluoromethan		ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
,1-Dichloroethene		ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
,1,2-Trichloro-1,2,2-Triffuoroetham	1000	ND	6.5.	ND	7.2	ND.	6.3	ND	6.0	ND	6.0
Carbon Disnifida	22.78	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Acetone .	100000	70 J	13	87		79	13	32	12.0	16	12.0
lethyl Acetate		ND I	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Methylene Chlorida	200	ND	6.5	ND	7.2	ND .	6.3	ND	6.0	ND	6.0
rans-1,2-Dichloroethen	Same Sin.	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Methyl tert-Butyl Ether		ND J	6.5	NDJ	7.2	ND1	6.3	ND)	6.0	NDJ	6.0
,1-Dichloroethant	8.7	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
is-1,2-Dichloroethene		ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
-Butanone	50000	ND 1	13	ND	14	ND	13	ND	12.0	ND	12.6
Bromodichloromethan:	200	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
hioreform	1000	ND	6.5	ND	7.2	79	6.3	. 32	6.0	ND	6.0
,1,1-Trichioroethans	50000	ND	6.5	ND	7.2	.ND	6.3	ND	6.0	ND	6.0
yclohexanı	mostly (ND.	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Carbon Tetrachlorids	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Senzene	1000:	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
,2-Dichioroethane	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
richloroethene	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
,2-Dichioropropuns	2000	ND	6.5	ND	7.2	ND	6.3	ND ND	6.0	ND ND	6.0
Bromodiehloromethan:	25586.	ND	6.5	68	7.2	ND GX	6.3	ND ND	6.0	ND	6.0
is-1,3-Dichloropropens	10000	ND	6.5	ND ND	7.2	ND ND	6.3 13	ND ND	12.0	ND	12.0
-Methyl-2-Pentanon:	700000	ND J	13	ND ND	14	ND ND	6.3	ND	6.0	ND	6.0
Coluent	500000	ND	6.5	ND	7.2	ND	6.3	ND ND	6.0	ND	6.0
rans-1,3-Dichloropropens		. ND.	6.5	ND	7.2	ND ND	6.3	ND	6.0	ND	6.0
,1,2-Trichloroethans	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Tetrachloroethen:		ND ND	6.5	ND	7.2	ND	6.3	ND ND	6.0	ND	6.0
Methylcyclohexam		ND	6.5	ND ND	7.2	ND	6.3	ND ND	60	ND ND	6.0
Oibromochloromethan: ,2-Dibromoethan:		ND	6.5	ND	7.2	ND ND	6.3	ND ND	6.0	ND.	6.0
-Hexanone	-	ND	13	ND	7.2	ND	13	ND	12.0	ND.	12.0
-nexamone Chlorobenzeni	1000	ND.	6,5	ND	7.2	ND	6.3	ND	6.0	ND.	6.0
Lingtonenzeni Lingibenzeni	LUVU	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
uyasenzen A/p-Xylene		ND	6.5	ND	7.2	ND	6.3	ND.	6.0	ND.	6.0
-Xylene		ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
tyrene		ND	6.5	ND	7.2	ND	6.3	ND \	6.0	ND	6.0
Fromoform	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
opropylbenzeni		ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND.	6.0
1.2.2-Tetrachloroethan	1000	ND	6.5 ,	ND	7.2	ND	6.3	ND	6.0	ND	6.0
3-Dichlorobenzent	100000	ND	6.5	ND	7.2	.ND ,	6.3	ND	6.0	ND	6.0
4-Dichiarobenzens	100000	. ND	6.5	ND	7.2	ND	6.3	ИD	6.0	ND	6.0
2-Dichlerobenzem	50000	ND	6.5	ND	7.2	6.7	6.3	ND	6.0	ND	6.0
2-Dibrome-3-Chloropropans	100	ND	6.5	ND	7.2	ND.	6.3	ND	6.0	ND	6.0
2.4-Trichlorobenzens	100000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
2.3-Trichiorobenzens	SA SA AMMARA	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0

Notes:

RL - Reporting Limit
TCL - Target Compound List
VOC - Volatile Organic Compounds
ug/kg - micrograms per kilograms
ND - Non detected value
J = The reported value is an estimate.
L - The reported value may be biased low.
K - The reported value may be biased high.

						TVA-1000 Serrening Results (units above			
Buring Location	Geoprada Pefansi Depih (Ribys)	Sample Number	Organic CLP No.	Dete	Sample Depth (G bgs)		nits above round)	Soil Description	References
						PID	FID		
D28	4*	0860-D-S28	B7H68	6/10/2010	1.6-1.8	N/A	N/A	Yellowish-orange fine to coarse sand, little gravel, dry	Raf. 2, p. 100; 48, p. 8; 66, p. 34.
D29	3.5*	0860-D-S29	B7H69	6/15/2010	1.6-1.8	N/A	N/A	Dark to light brown silt and fine to coarse sand, little gravel, dry	Ref. 2, p. 110; 48, p. 8; 66, p. 33.
		0860-D-\$37	B7H03	6/14/2010	1.6-1.8	0.69	0,28	Light brown to orange-yellow clay and silt, some coarse sand, trace grave!	,
D37	11	0860-D-SS37A	B7H04	6/14/2010	6.9-7.1	0.59	0.43	Orange-yellow silt and fine sand, little clay	Ref. 2, p. 107; 48, pp. 8-9; 57, p. 7; 66, pp. 42- 44.
		0860-D-SS37B	B7H05	6/14/2010	10.7-10.9	0.49	0.03	Light brown to orange fine to medium sand, trace fine gravet	
D40	2	0860-D-\$40	B7H12	5/11/2010	1.5-1.8	0	c	Brown medium to fine sand, some rocks, trace clay, loose	Ref. 48, p. 9; 51, p. 7; 57, p. 3; 66, p. 47.
D45	ì	0860-D-\$45	B7H36	5/11/2010	1.5-1.8	0.5	0	Brown medium to fine sand with rocks, trace clay, loose	
		0860-D-SS45A	B7H40	5/11/2010	3.5-4.0	0	0	Brown medium to fine sand with rocks, trace clay, loose	Ref. 2, p. 67; 48, pp. 9-10; 57, p. 3; 66, p. 57.
D46	1.5	0860-D-\$46	B7H37	5/11/2010	1.5-1.8	0	, ò	Brown medium to fine sand with loose rocks	Ref. 2, p. 67; 48, p. 10; 57, p. 3; 66, p. 58.
D47	3*	0860-D-S47	B7H38	5/11/2010	1.5-1.8	0 ,	· 0	Orange-brown medium to fine sand, loose, moist	Ref. 2, p. 67; 48, p. 10; 57, p. 3; 66, p. 59.
D48	5.5	0860-D-S48	B7H39	5/11/2010	1.5-1.8	1.2	0	Brownish-orange medium to fine sand, some rocks fragments, loose	
		0860-D-SS48A	B7H42	5/11/2010	5.0-5.3	v 1.9	0	Brownish-orange medium to fine sand, some rocks fragments, loose	Ref. 48, p. 10; 51, p. 7; 57, p. 3; 66, p. 60.
D53	9	0860-D-S53	B7H79	6/15/2010	0.4-0.6	44,44	166.5	Black tar-like material	Ref. 2, p. 109; 48, pp. 10-11; 57, p. 8; 66, pp.
533	,	0860-D-SS53A	B7HB1	6/15/2010	6.8-7.1	1.92	3.36	Light brown to black to yellowish-orange fine to coarse sand	CO 70

Table 8

Mansfield Trail Dump - Waste Source Delineation Phase

Soil Sampling Results - Target Compound List Volatile Organic Compounds

May-June 2010

WESTON Sample No		0860-D-SS53A	0860-D-828	0860-D-829	0860-D-8537B	0860-D-840	0850-D-6845A	0860-D-S46	0860-D-S47	0860-D-S4
EPA Sample No		B7HB1	B7H68	B7H69	B7H05	B7H12	B7H40	B7H37	87H38	B7H39
Commen		 		ļ	<u> </u>					
Dichiorodifluoromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 Ū	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Chloromethane	5,400 U	4.5 U	4.9 U	8.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
/inyl chloride	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
3romomethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	8.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Chloroethane (a.k.a. Ethyl chloride)	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 ป	5.5 U	6.5 U	6.1U	5.3 U
Trichlorofluoromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	8.1U	5.3 UJ
;1-Dichloroethylene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	62 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2-Trichloro-1,2,2-triftuoroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1U	5.3 UJ
Acetone	11,000 U	27	9.9 U	12 U	11111	12 U	11 U	13 U	12 U	11 U
Carbon disulfide	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	8.2 U	5.5 U	8.5 U	6.1 U	5.3 U
Methyl acetate	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	8.2 U	5.5 U	8.5 U	6.1 U	5.3 W
Methylene chloride	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	8.5 U	6.1 U	5.3 W
rans-1,2-Dichloroethylene	5,400 U	4.5 U	4.9 0	8.2 U	5.5 U	6.2 Ü	5.5 U	6.5 U	6.1 U	5.3 ∪
Methyl tert-butyl ether	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 W
,1-Dichloroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
is-1,2-Dichloroethylene	5,400 U	35	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	8.5 U	6.1 U	5.3 U
2-Butanone [a.k.a. Methyl ethyl ketone]	11,000 U	9 U	9.9 U	12 U	11 U	12 U	11 0	13 U	12 U	110
Iromochloromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Chloroform	5,400 U	4.5 U	4.9 U	8.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
,1,1-Trichicroethane	5,400 U	56	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 LU
Cyclohexane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Carbon tetrachionide	5,400 W	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	5.1 U	5.3 W
Bertzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	. 6,1 U	5.3 U
,2-Dichloroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2U	5.5 U	₿.5 U	6.1 U	5.3 LU
_4-Dioxane	110,000 R	90 R	99 R	120 R	110R	120 R	110 R	130 R	120 R	110 R
Frichioroethylene	5,400 U	47	4.9 U	6.2 U	5.5 U	5.2 UJ	39	6.5 U	6,1 U	5.3 U
Methylcyclohexane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
,2-Dichloropropane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6,1 U	5.3 U
Promodichloromethane	5,400 U	4.5 U	4.8 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
is-1,3-Dichloropropene	5,400 U	4.5 U	4,9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.30
-Methyl-2-pentanone (a.k.a. Methyl isobutyl ketone)	11,000 U	90	9.8 U	12 U	11 U	12 U	11 U	13 U	12 U	11 U
Oluene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 W	5.5 U	8.5 U	6.1U	5.alu
rens-1,3-Dichloropropene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	8.5 U	6.1 U	5.3 U
.1;2-Trichloroethane	5,400 U	4.5 U .	4.9 U	6.2 U	5.5 U	6.2(U	5,5[U	6.5 U	6.1 U	5.3 U
etrachiomethylene	5,400 U	55	4.9 U	6.2 U	5.5 U	6.2 UJ	5.5 U	6.5 U	6.1 U	5.3 U
Hexanone	11,000 U	9 U	9.9 U	12 U	114	12 U	110	13 U	12 U	11 U
Pibromochloromethane	5,400 U	4.5 U	4.9 U	B.2 U	5.5 U	8.2 U	5.5 Ú	6.5 U	6.1 U	5.3U
,2-Dibromoethane	5,400 U	4.5 U	4.9 U	6.2 U	5.6 U	8.2 U	5.5 U	6.5 U	6.1 U	5.3 W
hlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	6.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
thylbenzene	100,000	4.5 U	4.9 U	6.2 U	5.5 U	8.2 UJ	5.5 U	6.5 U	6.1 U	5.3 U
-Xylene `	37,000	4.5 U	4.9 U	6.2 U	6.6 U	8.2 UJ	5.5 U i	8.5 U	6.1 U	5.3 U
n,p-Xylene	150,000	4.5 U	4.9 U	6.2 U	5.5 U	8.2 (1)	5.5 U	6.5 U	6.1 U	5.3 U
tyrene	5,400 U	4.5 U	4.9 U	6.2 ∪	5.5 U	8.2 UJ	5.5 U	6.5 U	6.1 U	5.3 U
romaform	5,400 U	4.5 W	4,9 W	6.2 UJ	5.5 U	8.2 U	5.5 U	6.5 U	6.1 U	5.3 U
opropylbenzene (a.k.a. Cumene)	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	8.2 W	5.5 U	6.5 U	6.1 U	5.3 U
1,2,2-Tetrachioroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	8.2 U	5.5 U	6.5 U	6.1 U	5.3 1/
3-Dichlorobenzene	5,400 U	4.5 W	4.9 U	6.2 UJ	5.5 U	8.2 U	5.5 U	6.5 U	6.1 U	5.3 U
4-Dichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5U	8.2 U	5.5 U	6.5 U	6.1 U	5.3 U
2-Dichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	8.2 U	5.5 U	6.5 U	6.1 U	5.3 ()
2-Dibromo-3-chloropropane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
2,4-Trichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5U	6.2 U	5.5 U	6.5 U	6.10	5.3 U
2,3-Trichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 0	5.5 U	6.5 U	6.1 Ú	5.3 U
aferences	Ref. 48, p. 52; 49, pp. 230, 242; 51, p. 22.	Ref. 48, p. 53; 49, pp. 235, 247; 51, p. 22.	Ref. 2, p. 100; 48, p. 37; 49, p. 410.	Ref. 48, p. 52; 49,	Ref. 48, p. 47; 49, p.	Ref. 48, p. 18; 49,	Ref. 48, p. 18; 49, p.	Ref. 48, p. 18; 49,	Ref. 48, p. 18; 49,	

All results in micrograms per kilogram (µg/kg

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the

U.) = The analyte was not detected at a level greater than or equal to the educated CRQL. However, the
R = The samelyte was not detected at a level greater than or equal to the detailed CRQL. However, the
R = The samelyte was not detected at a level greater than or equal to the detailed CRQL. However, the

Attachment B-3:

Chain of Custody Records

Page 1 of 3

Removal Action Section

Weston Sciutions, Inc., Edison, NJ EPA Contract Number: EP-W-08-072 CHAIN OF GUSTODY RECORD

Mansfield Trail Dump Contact Name: Brittney Kelly

Contact Phone: 908-565-2975

No: 2-031212-182347-0001

DateShipped:

Lab: EPA DESA Laboratories

732-906-6886

Lab	<u> </u>	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
018-6	0]	8-041-0210-001	S-041	Soil Moisture	Soil	3/12/2012	13:30	1	4 oz glass jar	4 C	Υ
-0	2	S-041-0210-001	S-041	TCL VOCs	Soil	3/12/2012	13:30	12	5 g Encore	4 C	Y
9	22	S-041-0210-002	S-041	TCL VOCs	Soil	3/12/2012	13:30	4	5 g Encore	4 C	N
	W.	8 041-0210-002	3-041	Soil Moisture	Soll	9/12/2012	13:30	-	4 oz glass jar	40-	N-7
-0	3	S-042-0207-001	8-042	TCL VOCS	Soil	3/12/2012	13:45	4	5 g Encore	4 C	N
-0	3	S-042-0207-001	8-042	Soil Moisture	Soil	3/12/2012	13:45	1	4 oz glass jar	4 C	N
-0	4	8-043-0212-001	8-043	TCL VOCs	Soil	3/12/2012	13:50	4	5 g Encore	4C	N.
_0		S-043-0212-001	S-043	Soil Moisture	Soil	3/12/2012	13:50	1	4 oz glass jar	4 C	N
_0	2	S-044-0207-001	8-044	Soit Moisture	Soil	3/12/2012	13:58	1	4 oz glass jar	4°C	N
-0		9-044-0207-001	9-044	TCL VOCs	Soil	3/12/2012	13:58	4	5 g Encore	4C	N
-0	6	S-045-0207-001	S-045	Soil Moisture	Soil	3/12/2012	14:04	1	4 oz glass jar	4 C	N
	26	9-045-0207-001	S-045	TCL VOCs	Soil	3/12/2012	14:04	4	5 g Encore	4 C	N
-0	7	9-046-0208-001	S-046	TCL VOCs	Soil	3/12/2012	14:12		5 g Encore	4C	N
-0,	7	S-046-0208-001	S-046	Soil Moisture	Soil	3/12/2012	14:12	1	4 oz glass jar	4C	N 🤲
- 6	8	8-047-0207-001	S-047	TCL VOCe	Soil	3/12/2012	14:20	4	5 g Encore	4C	N
-0	8	8-047-0207-001	S-047	Soil Moisture	Soil	3/12/2012	14:20	1	4 oz glese jer	4 C	N
-6	9	8-048-0207-001	S-048	TCLVOCs	Soil	3/12/2012	14:27	4	5 g Encore	4 C	N
-6	9	S-048-0207-001	S-048	Soil Molature	Soll .	3/12/2012	14:27	1	4 oz glass jar	4 C	N
-7	Ó	S-049-0207-001	S-049	TCL VOCs	Soil	3/12/2012	14:35	` 4	5 g Encore	4C	N

3/13/2

* Not Collected Same Location as S-041-0910-001 Special Instructions TAT 7 days

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ALL SAMPLES! Analysis	R/S	3/12/12	Stor	3/12/12	1730						
((Seto	s/a/a	Walk-IN at DESA	5/12/12	1850				;	A Marie Comment	
	, 	\subseteq	TO WE TOWN	2.3/41	29:00) CH					
		C			2000			TO A SAN TO SAN			

Temp. 7.8° ON 100 \$0 3/13/12

Page 2 of 3

Removal Action Section

Weston Solutions, Inc., Edison, NJ EPA Contract Number: EP-W-08-072

Special Instructions: TAT 7 days

CHAIN OF CUSTODY REGORD

Manafield Trail Dump
Contact Name: Britiney Kelly
Contact Phone: 908-865-2975

No: 2-031212-182347-0001

SAMPLES TRANSFERRED FROM

CHAIN OF GUSTODY#

DateShipped:

Lab: EPA DESA Laboratories 732-906-6886

Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	M8/M8D
618-10	S-049-0207-001	S-048	Soft Moisture	Soll	3/12/2012	14:35		4 oz glass jar	4C	N
	S-050-0209-001	8-050	Soil Moisture	Sall	3/12/2012	14.42		4 oz glasa jer	4 C	N
-11	S-050-0209-001	S-050	TCL VOCS	Soil	3/12/2012	14.42	4	5 g Encore	4C	N
-12	S-051-0208-001	S-051	TCL VOCS	Seil	3/12/2012	14:50	4	5 g Encore	4 C	N
12,	S-051-0206-001	S-051	Soil Maisture	Sall	3/12/2012	14:50		4 oz glase jar	46 °	N
-13	S-052-0210-001	S-062	TCL VCCs	Soll	3/12/2012	14:58	4	5 g Encore	4C	N
-18	S-052-0210-001	8-052	Soil Moisture	Sell	3/12/2012	14:58		4 oz glase jar	4 C	N
-14	8-053-0210-001	8-053	Soll Moisture	Soil	3/12/2012	15:07	1771	4 oz glase ar	4 C	N
-14	S-053-0210-001	8-053	TGL VOCs	Soll	3/12/2012	15:07	4	5 g Encore	46	N
215	5-054-0210-001	8-094	TCLVOCs	901	3/12/2012	15:16	4	5 g Encore	40	N
-15	8-054-0210-001	S-054	Soil Moisture	Soil	3/12/2012	15:15		4 oz glass jar	4 C	N
-16	S-055-0209-001	S-065	Soil Moisture	Soil	3/12/2012	16:23		4 oz glass jar	40	N
-16	9-055-0209-001	8-065	TCLVOCs	Soil	3/12/2012	15:23	4	5 g Encore	4 C	N
-17	S-056-0206-001	8-056	TGL VOGs	Soll	3/12/2012	15:30	4	6 g Encore	4C	N
-17	S-056-0206-001	S-056	Soil Moisture	Soll	3/12/2012	15:30	1	4 oz glass jar	40	N X
18	S-057-0207-001	S-067	TCLVCCs	Soil	3/12/2012	15:42		5 g Encore	46	N
-18	9-057-0207-001	8-057	Soil Moisture	Sell	3/12/2012	18:42	1	4 oz glass jar	40	N
-19	S-058-0209-001	S-058	TCLVOCs	Soil	3/12/2012	15:58		5 g Encore	4 C	N
- 19	S-058-0209-001	8-058	Soil Moisture	Soil	3/12/2012	15:58	1	4 oz glass jar	4 C	N

Items/Reason	Relinquished by	Date	Received by	Date Time	Items/Reason	Relinguished By Det	Received by	Date Time
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Page 3 of 3

Removal Action Section

Weston Solutions, Inc., Edison, NJ EPA Contract Number: EP-W-08-072 CHAIN OF CUSTODY RECORD

Mensfield Trail Dump

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 No: 2-031212-182347-0901

DateShipped:

Lab: EPA DESA Laboratories 732-906-6886

	Sample#	Location	Analyses	Matrix	Collected	Sample Num Time Cor	Container	Preservative	MS/MSD
8-20	6-059-0207-001	S-059	Soil Moleture	Sell	3/12/2012	16:14	1 4 oz glass jar	4 C	N
- 20	S-059-0207-001	S-059	TCL VOCs	Soil	3/12/2012	16.14	4 5 g Encore	4C	N
									aday
2				in the state of th	***				
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		SAMPLES TRANSFERRED FROM	Sept.
Special Instructions: TAT 7 days		CHAIN OF CUSTODY #	N. M. 44

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M.	Items/Reason	Relinquished by	Date	Received by	Date Time	Items/Reason	Relinquished By Date	Received by	Date Time
	ALL Sangles/ Amilias is	BIN.	3/12/12	HE	3/12/12 1730				
				Walk in-at					
				- Harden	3/13/12 9:00				
9	0.		C						

Page 1 of 3

Removal Action Section

Weston Solutions; Inc. 1090 King Georges Post Rd Edison; NJ 08837 CHAIN OF CUSTODY RECORD

Site: Mansfield Trail Dump Contact Name: Britiney Kelly Contact Phone: 908-565-2975 No. 2-03/312/176367-0003

DateShipped: 3/13/2012 Leb: EPA DESA Laboratories 732-908-6888

	Lab#	Sample #	Location	Analyees	Hatris	Göllegted Semple Time	Itumb Container Cont	Preservati	tve IIIS
ðį	19-21	RB-031312-001	Outside Site Traker	TGLVOG# K	Water	3/13/2012 15:00	1 VOA	40	N
30	19-01	S-060-0206-001	S-080	TCL VOCa	Soll	3/13/2012 12:59	12 5 g Encore	4C	γ
	-01	S-060-0208-001	S-060	Soil Moisture	Sall	3/13/2012 12:58	1 4 oz glass jar	46	Y
	-02	8-060-0208-002	S-060	TCL VOCE	Sall	3/13/2012 12:88	4 Se Encole	40	N
	-02	\$-060-0208-002	S-080	Soil Moisture	Soll	3/13/2012 12:58	1 4 oz glasa jer	40	N
1	_03	S-061-0210-001	S-060	TCL VOCs	Soil	3/13/2012 14:15	4 5 g Encore	4 C	N
1	<i>-03</i>	S-061-0210-001	S-060	Soil Moisture	Soil	3/19/2012 14/16	1 4 oz glass jar	40	N
L	-04	8-062-0212-001	S-062	TCLYCCO	Soil	3/13/2012 12:10	4 5 g Encore	4 C	N
L	-04		5-082	Soil Moisture	Sal	3/13/2012 12:10	1 4 oz glass jar	4 C	N
	-05	8-063-0212-001	S-063	TCL VOCs	Soll	3/13/2012 12:26	4 5 g Encore	46	N
		S-063-0212-001	\$-083	Soil Moisture	Soil	3/13/2012 12:26	1 4 oz glass jar	40	N
L		6-064-0210-001	B/064	TCLXOCs	861	3/13/2012 13/42	4 5g Encare	46	N
		8-064-0210-001	9-064	Soil Moisture	Soil	3/13/2012 13/42	1 4 oz glase lar	4 C	N
L	-07	S-065-0208-001	S-065	TCL VOCs		3/13/2012 13:50	4 5 g Encore	4 C	N
	-07	8-065-0208-001	S-088	Sall Moisture	Soll	3/19/2012 13:50	1 4 oz glasa jar	40	N
L		S-066-0206-001	S-088	TCL VOGs	Sol	3/13/2012 /11:35	4 5 g Encore	40	N
L		S-066-0208-001	S-088	Soil Maisture	Soil	3/19/2012 11:38	1 4 oz glass (af	4 C	N
Ŀ		S-067-0206-001	S-087	TCL VOC8	Soil	3/13/2012 11:25	4 8 g Encore	46	N
L	09	8-067-0206-001	\$4087	Soil Maisture	Sall	3/13/2012 11:28	1 4 cz glass ler	4G	N
۲		Lab Deev	id 1-vocvil	with their sign	ce + not lie	celved 20 3/14/12		1	Mar Cont No.

Special instructions: TAT7 days

SAMPLES TRANSPERRED FROM CHAIN OF CUSTODY I

linguished by Dr	ste Rec	alved by	Date T	ime i	ems/Reason	Relinguishe	d By Date	Bereited to	/ Date Time
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66 n	股糾	ELWY 3	14127	:20 817					
	W 118	M HWIR ALL	A Hala Les 31	St state for market	M 11412 RE MILLE 50 LOC 70/2 Hour with 3/14/127:20 MM	1 1/4/2 /2 MAIL 18:50	1 114 12 12 MAIL 18:50 MILL JULY 3/14/12 7:20 MI	1 1/2 /2 MUIC 18:50	1 1 1 1 2 1 2 3 1 2 1 2 3 1 2 1 2 50 1 2 1 2 1 2 2 50 1 2 1 2 2 50 1 2 1 2 7 1 2 5 0 1 2 7 1 2 5 0 1 2 7 1 2 5 0 1 2 7 1 2 5 0 1 2 7 1 2 5 0 1 2 7 1 2 5 0 1 2 7 1 2 5 0 1 2 7

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Page 2 of 3

Removal Action Section
Weston Solutions, Inc.
1090 King Georgee Post Rd
Edison, NJ 08837

CHAIN OF GUSTODY RECORD

Site: Manafield Trail Dump Contact Name: Britiney Kelly Contact Phone: 908-565-2975 No: 2-031312-176367-0003

DateShipped: 3/13/2012 Leb: EPA DESA Laboratories 732-908-6886

Lab	#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
0/9-	10	8-068-0208-001	S-088	TCLVOCs	Soll	3/13/2012	11;48	4	5 g Encore	4C	N
-	10	S-088-0208-001	S-068	Soil Moisture	Soil	3/13/2012	11.48		4 oz glass jar	4C	N
	11	5-069-0212-001	S-069	TCLVOCs	Soil	3/13/2012	12:40	4	8 g Encore	4.C	N
V	11	8-069-0212-001	S-089	Soil Moisture	Sell	3/13/2012	12:40	1	4 oz glass jar	4 C	N
-	12	S-070-0206-001	8-070	TCLVOCa	Soll	3/13/2012	14:35	4	5 g Encore	40	N
1	12	S-070-0206-001	S-070	Soli Moisture	Şoji	3/13/2012	14:35		4 oz glass jar	4C	N
	13	8-071-0210-001	9-071	TCLVOCS	Soil	3/13/2012	14:30		5 g Encore	4C	N
1	13	8-071-0210-001	S-071	Spil Moleture	Soil	3/13/2012	14:30		4 oz glass jar	46	N
1	14	8-072-0208-001	9-072	TCLVCCs	Soil	3/13/2012	13:10		5 g Encore	AC .	N
	14	S-072-0208-001	S-072	Soll Moisture	Soll	3/13/2012	13:10		4 oz glass jar	4C	N
-1	2	8-073-0104-001	8-073	TCLVOCS	Soil	3/13/2012	12:30		5 g Encore	4C>	N
-1	2	8-073-0104-001	S-073	Soll Molsture	Soil	3/13/2012	12:30		4 oz glass jar	46	N
-1	6	S-074-0408-001	8-074	TCLVOCs	Soil	3/13/2012	12:20		5 g Encore	4C	N
-1	6	S-074-0408-001	S-074	Soll Moisture	Soil	3/13/2012	12:20		4 oz glass jar	4C	N -
-1	7	8-075-0210-001	S-075	TCL VOCs	Soil	3/13/2012	13:20	4	5 g Encore	4C	N
1	7	S-075-0210-001	S-075	Soil Moisture	Soll	3/13/2012	13:20	1	4 oz glass jar	4C	N
-1	8	8-076-0206-001	8-078	TCLVOCs	Soil	3/13/2012	13:29	4	8 g Encore	4C	N
-1	8	S-076-0208-001	S-076	Soil Moisture	Soll	3/13/2012	13:29	1	4 oz glass jar	4C >	N
1	9	\$-077-0207-001	S-077	TCLVOCS	Soli	3/13/2012	13:35	4	5 g Encore	4C	N

회내고 Special Instructions: TAT7 days

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

items/Reason	Relinquished by	Date	Regelve	d by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date Tim
ALLSMARS	PA	8/18/12	R	为	71717	E:37					
4)(106	3117	Total Contract of the Contract	J. 111	13/14/1	27:20 P	7)				
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Page 3 of 3

Removal Action Section

Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF GUSTODY RECORD

Site: Mansfield Trail Dump Contact Name: Britiney Kelly Contact Phone: 908-565-2975 No: 2-031312-175357-0003

DateShipped: 3/13/2012 Lab: EPA DESA Laboratories 732-908-6888

	* .:				atalaufauti ilka molesiatus				Type I company to the last of	Transmission and
i.,	Lab#	Sample #	Location	Analyges	Matrix	Collected	Sample Time	Numb Container Cent	Preservative	
203	19 19	S-077-0207-001	S-077	Soil Moisture	Soil	3/13/2012	18:35	1 4 oz glasa jar	40	N
7	-20	S-078-0208-001	\$-078	TCL VCCs	Soil	3/13/2012	12:00	4 5 g Encore	4C	N
17	-20	8-078-0208-001	S-078	Soil Moisture	Soil	3/13/2012	12:00	1 4 oz glass jar	4G	N
20					A A A A A A					
14	<i> </i>	2 /		10000000000000000000000000000000000000						
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	<u> </u>						18%, 854.8			
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SAMPLES TRANSFERRED FROM GHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	items/Reason	Relinquished By	Date	Received by	Date Time
ALL Samples Analysis	Sec .	3/8/R	AD	#14/Z	1850					
11.1	los	3/12/	Many (MI)	3/14/1	27:20	om				

Page 1 of 2

Removal Action Section

Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

GHAIN OF GUSTODY RECORD

Site: Mansfield Trail Dump Contact Name: Brittney Kely Contact Phone: 908-565-2975 No: 2-031412-185440-0004

DateShipped:

Lab: EPA DESA Laboratories 732-906-6886

Lab#	Sample #	Location	Analyses	Time Matrix	Collected	Numb Cont	Container	Preservative	MS/MS
	RB-031412-001	Outside Site Trailer	TCLVCCs *	12:45 Water	3/14/2012		VOA	4C	N
2-01	8-079-0207-001	S-079	TCL VOCs	111.50 Soll	3/14/2012	12	5 g Encore	4 G	
-01	S-079-0207-001	S-079	Soil Moisture	11-10 Sel	3/14/2012	C. Mindred College Col	4 cz glass jar	4C	N
-02	S-079-0207-002 ***	S-079	TCL VOCs	11. So Soll	3/14/2012	And in contrast of the contras	5 g Encore	*C	N
-02	S-080-0212-001	S-080	TCL VOCs	9.15 801	3/14/2012		5 g Encore	4.0	N.
-03	S-080-0212-001	S-080	Soil Moisture	9 / Soll	3/14/2012	The state of the s	4 oz glase jar	40	
-04	S-081-0208-001	S-081	TCLVCCs	10. LI 7 Soli	3/14/2012	And the second s	5 g Encore	¥C	N
-04	S-081-0208-001	S-081	Scil Moisture	/C 47 Seil	3/14/2012	The state of the s	4 oz glass jar	4.c	of Charles South
-0 <u>5</u>	8-082-0212-001	8-082	TCLVOCs	9:20 Soil	3/14/2012	ROTHER SECTION OF THE PROPERTY	δ g Encore	4 C	N
-01	S-082-0212-001	5-082	Sail Maisture	9:20 Soil	3/14/2012	1918 - 18			
-oh	S-083-0210-001	S-083	TCLVCCs	12:08 Soll	3/14/2012	****	4 oz glasa jar	4C	N
-oL	S-083-0210-001	S-083	Soil Moisture	/2.208 Soil	3/14/2012	A Company of the Comp	5 g Encore	4 C	N
-07	The state of the s	S-084	TCL VOCs	/v. 33 Soil	3/14/2012	Control of the Contro	4 CZ glase jer	46	N
-07	Section Control of the Control of th	S-084	Soil Moisture	70 33 Soil	3/14/2012	The second secon	5 g Encore	#C	N
	AND THE RESERVE THE PARTY OF TH	S-085	TCL VOCs	/O:25 Soll	3/14/2012	The state of the same of the s	4 oz gless jer	4C	N
		S-085	Soil Moisture	/0:24 Soil	3/14/2012	A STATE OF THE STA	5 g Encore	4 C	N
		S-088	TCL VOCs	70:10 Soll	3/14/2012	The second later than	4 oz glass jar	4 C	N
	And the second s	S-086	Soil Moisture	10 :/a Sell	3/14/2012	11.0	5 g Encore	4C	N
	100000000000000000000000000000000000000	S-087	TCL VOCs	/0:c08all	3/14/2012	CONTRACTOR OF THE PROPERTY OF THE PARTY OF	4 oz glass jar	4.6	N
-		own head space		Medine time lotter	I WITHEVIE		8 g Encore	40	N j
				MURLITHE LAMP DUEL	TOW SOME G	aumet:	ZA 3/L/p. Es transfér	Sollarstur	god //s

Special instructions: Email Results to Brithney, Kelly@ westonsolutions.com

CHAIN OF CUSTODY #

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Items/Reason Relinquished	by Date	Received by	Date	Time	Items/Reason	Relinguished By	I MALL		
ALL SAMPLES 7886	3/19/19	- // .		/530		Vanidaga an ex	Date	Received by	Date Time
All Ringles La	3/11/2	to be found	3/15/1:	7.15					
	124 1 (VI S. N. 124 S.	Sur Car Michigan States		1					

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1203

Removal Action Section

Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF CUSTODY RECORD

Site: Manafield Trail Dump Contact Name: Brittney Kely

Contact Phone: 908-585-2975

No: 2-031412-165440-0004

DateShipped:

Lab: EPA DESA Laboratories

732-906-6886

Lab#	Sample #	Location	Analyses	Mautz	Collected	Numb Container Cont	Preservative	MS/MSD
722-10	S-087-0207-001	S-087	Solf-Moisture	10:00 Soll	3/14/2012	i 4 oz glass jar	4 C	N
-11	S-088-0208-001	S-088	TGL VOCs	//. 28 Soil	3/14/2012	4 5 g Encore	4 C	N
-()	S-088-0208-001	9-088	Soft Moleture	//. 2.8 Soil	3/14/2012	1 4 oz glass jer	4G	N
- /2	S-089-0206-001	S-089	TOL VOCs	9:0 Soll	3/14/2012	4 5 g Encore	4.C	N
-12	S-089-0206-001	S-089	Soil Moisture	9:05 Sol	3/14/2012	1 4 oz glass jar	40	N
-13	S-090-0212-001	S-090	TCL VOCs	10:20 Soil	3/14/2012	4 8 g Encore	4.0	N
-13	5-090-0212-001	S-090	Soil Moisture	/0:20 Soil	3/14/2012	1 4 oz glasa jar	4C	N
-14	9-091-0207-001	S-091	TCL VOCs	1/ :16 Sall .	3/14/2012	4 5 g Encore	4C	N
-14	8-091-0207-001	S-091	Soil Moisture	11:16 Soil	3/14/2012	1 4 oz glass jar	4C	N
-15	S-092-0212-001	S-092	TCL VOCs	11:00 Sall	3/14/2012	4 5 g Encore	4C	N
-13	5-092-0212-001	9-092	Soil Moisture	11:00 Sell	3/14/2012	1 4 oz glass jar	4C	N X
-16	S-083-0210-001	S-093	TGL VOCs	O : 38 Soil	3/14/2012	4 5 g Encore	40	N
-16	S-093-0210-001	S-093	Soil Moisture	10.38 Soil	3/14/2012	1 4 oz glass jar	4C	N
-17	S-094-0210-001	S-094	TGL VOCs	/0: <u>ss</u> Sell	3/14/2012	4 5 g Encore	4C %	N
-17	S-094-0210-001	S-094	Sail Moisture	Id : KT Soil	3/14/2012	1 4 oz glass jár	4C	N
-18	S-098-0208-001	S-095	TCLVOCS	10:147 Soll	3/14/2012	4 5 g Encore	4 C	N
-18	8-095-0208-001	S-095	Soil Moisture	10:47 Soil	3/14/2012	1 4 oz glass jar	40	N
-:19	8-096-1220-001	S-098	TCL VOCs	1 : O Soil	3/14/2012	4 5 g Encore	4 C	N
_14	8-098-1220-001	S-096	Soil Malahira	II A GAIL	2/44/2042	Name of the State		

ے، Special Instructions:

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By Da	te Received by	Date Time
ALL ANOLYSIS	BF	5/14/k	\mathcal{H}_{Δ}	3/14/16	1530				
- ',	D,	3/4/12	To Sawar	المال المحال	7:15				
	Taring (A)								

Received, hand-delivered on ice 2.0°C 3/14/12@1752 BUSHIE

Page 1 of 3

1205

Removal Action Section

Weston Solutions, Inc., Edison, NJ EPA Contract Number: EP-W-08-072 CHAIR OF GUSTODY RECORD

Mansfield Trail Dump Contact Name: Britiney Kelly Centact Phone: 908-565-2975 No. 2-0329: 2:(34702-06-18

Date Delivered: 3/29/12 Lab: EPA DESA: Laboratories Lab Phone: 732-906-6886

Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Container Cont	Freservati	e Bini
_01	S-166-0103-001	S-168	TCL VOCa	. Soll	3/29/2012	12:45	12 5 g Encore	4C	Y
-01	8-166-0109-001	S-166	Solf Moisture	Soil	3/29/2012	12:45	f 4 oz glass jar	4C	N
-02	S-166-0103-002	8-166	TICL VOCs	Soil	, granze e	1245	4 5g Encore	46	N
-02	\$164-0103-002	S-166	Soil Maisture	r Sall	3/29/2012	1245	1 4 oz glass ja:	40	N
-03	5-167-0109-001	S-167	TEL VOCS	Soil	3/29/2012	12:55	4 6 g Encore	40	N
-02	\$-167-0103-001	S-167	Self Moisture	Soll	9/29/2012	12:56	1 4 oz glasa jar	40	- N
10 U	\$468-0103-001	S-168	TOL VOCe	Soil	3/29/2012	13/00	4 5 g Encore	40	N.
-04	(Singulation)	S-168	Soil Moisture	Soil .	3/29/2012	18:00	1 4 oz glass jar	4C	N
-05	S-189-0109-001	S-169	TCL VOCs	Soil	9797017	13:05	4 5 c Salcote	40	N-
-05	S-18840100-001	S-189	Soil Moisture	Sal	3/29/2012	19:08	1 4 oz glass ar	40	N
-06	S-170-01 (05-001)	S-170	TGLNGCs	Soil	3/29/2012	13:10	4 5g Encore	40	F N
-ob	S-17030105-001	S-170	Soil Moisture	Self	3/29/2012	13:10	1 4 oz glass jar	4C	N
-07	S471-0103-001	\$-171	TCLVOCA	Soil	3/29/2012	13:15	4 5; Encore	4C	, N
-07	\$17(1.0106-001)	S-171	Seli Misiature	Soil	3/29/2012	19:15	1 400 glass er	4C	SE N
-08	S-172-0103-001	\$172	TOL VOICE	Soil	3/29/2012	19:20	4 6g Encore	4 C	N
-08	S47720109-001	8-172	Soil Moisture	Soll	3/29/2012	13:20	4 oz giasa jar	4.0	N
-09	Care Director	\$478	TOLVOCS	/ Soil	3/29/2012	13.26	4 5 g Encore	4C	
روم-	S-179-2) (63-461	9-173	Soil Moisture	Soll	3/29/2012	18.25	1 4 oz glass er	4C	N
-/o	Canzanies de	S-17A	TCLVOCe	Sall	3/29/2012	13:30	4 Sc Encore	46	N

Special Instructions: 7 day turn around time. Please email signed COC and results to Britiney Kelly@westonsolutions.com.

SAMPLES TRANSFERRED PROM CHAIN OF CUSTOD'S

Items/Reason Relinquished by	Date Received by Date	Time Items/Resson Re	inquished By Cete Received	ov Date Time
All Sample By	2/24/12 / 1/26/2012 3/24/12	9:40 (9)	And the second s	The second secon
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Removal Action Section

Weston Sciutions, Inc., Edison, NJ EPA Contract Number: EP-W-08-072 CHAIN OF CUSTODY RECORD

Manafield Trail Dump Contact Name: Britiney Kelly Contact Phone: 908-565-2975 No: 2-032812-134704-00-18

Data Delivered: 9/29/12 Lab. EPA DESA Laboratories Lab Phone: 732-908-6886

Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Container Cont	a Preserve	ing Eur
9-10	S-174-0103-001	S-174	Soil Moisture	Soil	3/29/2012	13:30	1 4 oz glass jer	46	Ň
-11	8-175-0103-001	S-175	TCL VOCs	Soil	3/26/2012	12:55	4 5 g Encore	40	N
-11	S-175-0103-001	8-176	Soil Moisture	Soll	3/29/2012	12:55	1 4 oz glass ar	46	N
_12	8-176-0103-001	S-176	TCL VOCs	Soll	3/29/2012	18:00	4 5 g Encore	46	N
-/2	S-176-0103-001	S-176	Soil Moisture	Soil	3/29/2012	13:00	1 4 02 glass jat	40	N
-13	S-177-0103-001	S-177	TCLVOCs	Soil	3/29/2012	13:05	4 8 g Ensore	40	N
ーろ	S-177-0103-001	S-177	Soil Moisture	Soil	3/29/2012	13:05	1 4 oz glass jer	40	N
-14	S-178-0103-001	S-178	TCL VOCa	Soil	3/29/2012	13:10	4 5 g Encore	46	N
-14	S-178-0103-001	S-178	Soil Moisture	Sail	3/29/2012	13:10	1 4 oz glass jar	46	N
15	S-179-0103-001	S-179	TÇLVQCə	Sall	3/29/2012	13:15	4 8 g Encore	46	N
72	S-179-0103-001	S-179	Soil Moisture	Soil	3/29/2012	13:15	1 4 02 glass lar	40	N
16	S-180-0103-001	S-180	TCL VCCs	Soll	3/29/2012	13:20	4 5 a Encore	4C	N
-16	S-180-0103-001	S-180	Soil Moisture	Soll	3/29/2012	13:20	1 4 oz glass jar	46	N
-17	S-181-0103-001	S-181	TCL VOCs	Soll	3/29/2012	13:26	4 5 g Encore	4 C	N
-17	S-181-0103-001	S-181	Soil Moisture	Soll	3/29/2012	13:25	1 4 oz glass jar	4C	N
18	6-182-0103-001	S-182	TCL VOCs	Soll	3/29/2012	13:30	4 5 g Encore	4C	N
18	S-182-0103-001	S-182	Soil Moisture	Soil	3/29/2012	13:30	1 4 oz glass jar	40	N
-19	8-183-0103-001	S-183	TCLVCCs	Sell	3/29/2012	13:35	4 5 g Encore	4C	N
-19	8-163-0103-001	S-182	Soli Moisture	Soil	3/29/2012	13:35	1 4 oz giaes jar	40	N-

Special instructions: 7 day turn around time. Please email signed COC and results to Britiney Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

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	Relinquished by	Date Repeived	by Date	Time Items/	Reason Relinguish	ed By Date	Received by Date Time
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Page 3 of 3

Removal Action Section

Weston Solutions, Inc., Edison, NJ EPA Contract Number: EP-W-08-072 CHAIN OF CUSTODY RECORD

Mansfield Trail Dump Contact Name: Britiney Kelly Contact Phone: 908-565-2975 No. 2-0328 (2-134704-0018

Date Delivered: 3/29/12 Leb: EPA DESA Latroratories Lab Phone: 732-906-6886

	Sample #	Location	Analysee	Matrix	Collected	Sample Time	Numb Container Cont	Preservative	MS/MSC
-20	S-184-0103-001	S-184	TCLVCCs	Sall	3/29/2012	13:40	4 5 g Encore	46	N
-20	S-184-0103-001	S-184	Soil Moisture	Soil	3/29/2012	13:40	1 4 oz glass jar	4C	N
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Special instructions: 7 day turn around time. Please email signed COC and results to Britiney Keily@westonsolutions.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Page 1 of 4

Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd-Edison, NJ 08837

CHAIN OF CUSTODY RECORD

Site: Mansfield Trail Site Contact Name: Britiney Kely Centera Phone: 908-565-2975 No: 2-031512-154337-0006

DateShipped: Leb: EPA DESA Laboratories

732-906-6886

Lab#	Sample #	Location	Analyses	Matrix	Sample Type	Collected	Semple Time	Numb Cent	Centainer	Preservativ	HS/H
26-0 1	8-097-5253-001	8-097	TGL VOCs	Soll	Field Sample	3/15/2012	12:30		5 g Encore	ec.	N
-01		S-097	Soil Moisture	Soll	Field Sample	3/15/2012	12:30	1	4 oz glass jar	4 c	N ·
-02	S-096-6051-001	S-098	TCLVGCa	Soli	Field Sample	3/15/2012	12:19	4	8 g Encore	46	N
-ଫ	S-098-5051-001	S-098	Scil Maisture	Soil	Field Sample	3/16/2012	12:19	1	4 oz glass jar	4 C	N
-03	8-099-5051-001	S-099	TCL VOGS	Sall	Field Sample	3/15/2012	12:12	•	5 g Encore	4C	N
-03	\$-099-5051-001	S-099	Soil Moisture	Sali	Field Sample	3/15/2012	12:12	1	4 oz glasa jař	40	N
-c4	S-100-5051-091	8-100	TGL VOCs	Sell	Fleid Sample	3/15/2012	11:29	•	8 g Encare	4C	N
-04	S-100-5051-001	S-100	Soil Moisture	Seli	Field Sample	3/15/2012	11:29	1	4 oz glast jer	4 C	N .
-05	8-101-5253-001	S-101	TGL VOCs	Soil	Fleid Sample	3/15/2012	12:00	4	5 g Encore	4C	N
-05	/8-101-6253-001	S-101	Soll Moisture	Soil	Field Sample	3/15/2012	12:00	1	4 oz glass jar	40	N
-06 112	8-102-2627-001	S-102	TCL VOCs	Soll	Field Sample	3/16/2012	12:41	4	5 g Engore	40	N

Special Instructions: TAT 7 days

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

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Page 2 of 4

Removal Action Section Westen Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

Site: Manafield Trail Site Contact Name: Britiney Kely Contact Phone: 908-885-2975 Nov.2-031812-184337-0006

DateShipped Lab: EPA DESA Laboratories 732-806-6888

Lab#	Sample #	Location	Analyses	Matrix	Sample Type	Collected	Sample Time	Numb Container	Proserve	B) HSI
1	S-102-2627-001	S-102	Soil Moisture	Sali	Field Sample	3/16/2012		1 dar glass jar	40	N
1000	8-103-1213-001	8-103	TCL VOCe	Sall	Field Sample	3/16/2012	11:10	4 5 g Encore) C	N
ે-ભ	8-103-1213-001	8-103	Soil Moleture	Soll	Field Sample	3/15/2012	11:10	1: 4 oz glass jar	+0	N
-08	S-104-1213-001	S-104	TCLVOCA	Soil	Field Sample	3/15/2012	11:35	12 5 g Ericore	4C	Y
-08	8-104-1213-001	S-104	Soil Moisture	Soil	Field Sample	8/15/2012	11:35	1 4 oz gjæsa jer	46	N.
-09	8-104-1213-002	S-104	TCL VOCS	Soll	Field Ouplicate	3/16/2012	11:35	4 Bg Encora	40	N
-09	8-104-1213-002	S-104	Soll Moisture	Soil	Field Duplicate	3/15/2012	11:35	1 4 oz glase jer	40	N
-10	8-105-0607-001	S-105	TCL VOCs	Sall	Field Sample	3/16/2012	11/63	4 5 g Encore	40	N
-10	S-105-0607-001	S-105	Soil Moisture	Soil	Field Semple	3/15/2012	11:63	1 4 oz glass jar	46	18
-11	S-106-2425-001	S-108	TCLVOCs	Soli	Field Sample	3/15/2012	12:06	4 5 g Encore	46	N
-11	S-108-2425-001	8-108	Soil Moisture	Soil	Fiek Sample	3/15/2012	12:08	1 4 oz glass jar	46	N

Special instructions: TAT 7 days

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY#

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Ramoval Action Section Weston Solutions, Inc. 1080 King Georges Post Rd Edison, NJ 08837 CHAIN OF GUSTODY RECORD

Site: Mansfield Treil Site Contact Name: Britmey Kely Contact Phone: 908-565-2975 No: 2-031512-164337-9006

DateShipped: Leb: EPA DESA Laboratories

732-909-6888

Lab#	Sample #	Location	Analyses	Matrix	Sample Type	Collected	Sample Time	Numb Container Cont	Preserv	
Z6-1Z	8-107-1617-001	8-107	TCL VOCs	Soli	Field Sample	9/15/2012	12/28	4 5 g Encore	46	N
-12	8-107-1617-001	S-107	Soil Moisture	Soil	Field Sample	3/15/2012	12:26	1 4 oz glass jar	46	N
-\3	S-108-0607-001	S-108	TCLVOCs	Soil	Field Sample	3/15/2012	12:30	4 5 g Encore	4°C	N
-13	S-108-0607-001	S-108	Sall Moleture	Soil	Fleid Sample	3/15/2012	12:30	1 4 oz glast jar	4C	N
-14	8-109-2425-001	S-109	TCL VOCs	Golf	Fleid Sample	3/15/2012	10:60	4 5 g Encore	#C	N
	8-109-2425-001	S-109	Sqii Moisture	Soil	Fjeid Sample	8/15/2012	10:50	1 4 oz glass jar	46	N
-15	8-110-2627-001	S-110	TCL VOCa	Soil	Fleid Sample	9/15/2012	11:01	4 5 g Encore	40	N
-\5		8-110	Soil Moisture	Sall	Field Sample	3/15/20/12	11:01	1 4 oz glase jar	40	N
-16	8-111-2930-001	S-111	TCLYOCs	Soli	Field Sample	3/15/2012	11:05	4. 8 g Encore	46	N
-16	8-111-2930-001	S-111	Soil Maleture	Soil	Field Sample	3/15/2012	11/05	1 4 oz glass jar	40	N
-12	8-112-1617-001	S-112	TCL VOCs	Soll	Field Sample	3/15/2012	10:45	4 5 g Encore	46	1

Special instructions: TAT 7 days

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Page 4 of 4

Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF CUSTODY RECORD

Site: Manafield Trail Site Contact Name: Britingy Kely Contact Phone: 908-565-2975 No: 2-031512-164337-0006

DateShipped:

Lab: EPA DESA Laboratories

732-906-6886

Sample#	Location	Analysee	Matrix	Sample Type	Collected	Sample Time		Container	Preservativ	MS/M
8-112-1617-001	\$-112	Soil Moisture	Soll	Field	3/15/2012	10:45	1	4 oz glass jar	46	N
8-113-1415-001	8-113	TCL VOCs	Soll	Fleid	3/15/2012	10:30	4	5 g Encore	46	N
S-113-1415-001	S-113	Soil Moisture	Soli	Field	3/15/2012	10:30	1	4 oz glass jar	40	N
8-114-2425-001	8-114	TCE VOCs	Soil	Field	3/15/2012	11:10	4	5 g Encore	4C	N
8-114-2425-001	8-114	Soil: Moisture	Soll	Field	3/15/2012	11:10	1	4 oz gisss jar	40	N
8-116-3637-001	8-116	TOLVOCA	Soil	Field	3/15/2012	11:17	4	5 g Encore	4 C	N
9-115-3837-001	S-115	Soil Moisture	Søll	Field	3/15/2012	11:17	•	4 oz glase jar	4C	N
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S-116-3637-001 S-115 TCL-VOCe Soll Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soll Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soll Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soll Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soll Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-115 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-116 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-116 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-116 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-116 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-116 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-116 Soli Moisture Soli Field 3/16/2012 11:17 Sample S-116-3637-001 S-116 Soli Moisture Soli Field S-116 Soli Moisture Soli Fi	Section Sect	8-112-1617-001 S-112 Soil Moisture Soil Field S16/2012 10:45 1 4 oz glass jar Sample S-113-1416-001 S-113 TCL VOCs Soil Field S16/2012 10:30 4 5 g Encore S-113-1416-001 S-113 Soil Moisture Soil Field S15/2012 10:30 1 4 oz glass jar Sample S-114-2426-001 S-114 TCL VOCs Soil Field S15/2012 11:10 4 5 g Encore S-114-2426-001 S-114 Soil Moisture Soil Field S15/2012 11:10 1 4 oz glass jar S-114-2426-001 S-115 Soil Moisture Soil Field S15/2012 11:17 4 5 g Encore S-115-3837-001 S-115 Soil Moisture Soil Field S15/2012 11:17 4 5 g Encore S-115-3837-001 S-115 Soil Moisture Soil Field S15/2012 11:17 4 5 g Encore S-115-3837-001 S-115 Soil Moisture Soil Field S15/2012 11:17 1 4 oz glass jar S-115-3837-001 S-115 Soil Moisture Soil Field S15/2012 11:17 1 4 oz glass jar S-115-3837-001 S-115 Soil Moisture Soil Field S15/2012 11:17 1 4 oz glass jar S-115-3837-001 S-115 Soil Moisture Soil Field S15/2012 11:17 1 4 oz glass jar S-115-3837-001 S-115 Soil Moisture Soil Field S-115-3837-001 S-115 Soil Moisture S-115-3837-001 S-11	8-112-1817-001 S-112 Soli Moisture Soli Field 9/16/2012 10:30 4 5 g Encore 4 C Sample S-113-1415-001 S-113 TCL VOCs Soli Field 3/16/2012 10:30 4 5 g Encore 4 C Sample S-113-1415-001 S-113 Soli Moisture Soli Field 3/16/2012 10:30 1 4 5 g Encore 4 C Sample S-114-2425-001 S-114 TCL VOCs Soli Field 3/16/2012 11:10 4 5 g Encore 4 C Sample S-114-2425-001 S-114 Soli Moisture Soli Field 3/16/2012 11:10 1 4 5 g Encore 4 C Sample S-114-3425-001 S-115 TCL VOCs Soli Field Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture Soli Field S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture S-115/2012 S-115/2012 11:17 1 4 5 g Encore 4 C Sample S-115-3837-001 S-115 Soli Moisture S-115/2012

Items/Reason	Relinquished by	Date	Received by	Date	Time	Iten	ns/Resson	Relinqui	hed By	Date	Received b	Date	Time
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Page 1 of 3

Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF CUSTODY RECORD

Manefield Trail Dump Contact Name: Britiney Kelly Contact Phone: 908-565-2975 No: 2-031612-111345-0008

DateShipped: 3/16/2012 Lab: EPA DESA Laboratories

732-908-6886

	Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MSAUSD
120302	8-22	RE-031612-001	Outside Site Trailer	TCL VOCs 🛠	Water	3/16/2012	12:00	1	VOA	4C	N
12030	28-01	8-116-0102-001	S-116	TCL VOCs	Soil	3/16/2012	09:26	12	5 g Encore	4C	Y
1	- 01	8-116-0102-001	S-116	Soil Moisture	Soil	3/16/2012	09:26	/ 1	4 oz glass jar	4C	N/
	-02	S-116-0102-002	S-116	TCL VOCs	Soil	3/16/2012	09:26	4	5 g Encore	4C	N
	_ ₀₂	S-116-0102-002	S-116	Soil Moisture	Soil	3/16/2012	09:26	1	4 oz glass jar	4 C	N
	-03	S-117-0203-001	S-117	TCL VOCs	Soil	3/16/2012	09:15	4	6 g Encore	4C	N
	_03	6-117-0203-001	S-117	Soil Moisture	Soil	3/16/2012	09:15	2.3	4 oz glass jar	4 C	N
	-04	S-118-0203-001	S-118	TCL VOCs	Soil	3/16/2012	09:32	4	5 g Encore	4 C	N
y Visit of	-04	8-118-0203-001	S-118	Soil Moisture	Soil	3/16/2012	09:32	1	4 oz glass jar	4 C	N
	20	S-119-0203-001	8-115	TCL VOCs	Soil	3/16/2012	09:38	4	5 g Encore	4 C	N
	-05	S-119-0203-001	S -115	Soil Moisture	Soil	3/16/2012	09:38	1	4 oz glass jar	4 C	N
	-06	S-120-0203-001	S-140	TCL VOCs	Soil	3/16/2012	09:45	4	5 g Encore	4C	N
	_06	9-120-0203-001	8-120	Soil Moisture	Soil	3/16/2012	09:45	1	4 oz glass jar	4C	N
	-07	S-121-0203-001	S-121	TCL VOCs	Soil	3/16/2012	09:44	4	5 g Encore	4 C	N
	-07	8-121-0203-001	S-121	Soil Moisture	Soit	3/16/2012	09:44	1	4 oz glass jar	4 C	N
	-08	S-122-0203-001	S-122	TCL VOCs	Soil	3/16/2012	09:50	4	5 g Encore	4 C	N
	-08	8-122-0203-001	S-122	Soil Moisture	Soil	3/16/2012	09:50		4 oz glass jar	4C	N
	-09	8-123-0203-001	8-123	TCL VOCs	Soil	3/16/2012	09:55	4	5 g Encore	4 C	N
₩ .	_09	S-123-0203-001	8-123	Soil Moisture	Soil	3/16/2012	09:55	Ť	4 oz glass jar	4 C	N

Special instructions: 7 day turn around time. Please email results to Britiney Kelly@westonsolutions.com.

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SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

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Page 2 of 3

Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Brittney Kelly Contact Phone: 908-565-2975

No: 2-031612-111345-0008

DateShipped: 3/16/2012 Lab: EPA DESA Laboratories

732-906-6886

	Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSC
2030	28-10	S-124-0203-001	S-124	TCL VOCs	Soil	3/16/2012	10:00	4	5 g Encore	4 C	N
1	-10	S-124-0203-001	S-124	Soil Moisture	Soil.	3/16/2012	10:00	. 1	4 oz glass jar	4 C	N
	-/1	8-125-0203-001	S-125	TCL VOCs	Soil	3/16/2012	10:06	4	5 g Encore	4 C	N
-	-11	8-125-0203-001	8-125	Soil Moisture	Soil	3/16/2012	10:08	1	4 oz glass jar	4 C	N
	-12	8-126-0203-001	S-126	TCL VOCs	Soil	3/16/2012	10:10	4	5 g Encore	4 C	N
-	-12	S-126-0203-001	S-126	Soll Moisture	Soil	3/16/2012	10:10	1	4 oz glass jar	4 C	N
	-13	8-127-0203-001	S-126	TCL VOCs	Soil	3/16/2012	10:15	4	5 g Encore	4 C	N .
	-13	S-127-0203-001	S-126	Soil Moisture	Soil	3/16/2012	10:15	1	4 oz glass jar	4 C	N
1	-14	S-128-0203-001	S-128	TCL VOCs	Soil	3/16/2012	10:22	4	5 g Encore	4 C	N
1	-14	S-128-0203-001	S-128	Soil Moisture	Soil	3/16/2012	10:22	1	4 oz glass jar	4 C	N
1	-15	8-129-3033-001	S-129	TCL VOCs	Soil	3/16/2012	10:30	/= 4	5 g Encore	4 C	N (
	-15	S-129-3033-001	S-129	Soil Moisture	Soil	3/16/2012	10:30	. 1	4 oz glass jar	4 C	N
1 1	-16	8-130-3637-001	S-128	TCL VOCs	Soil	3/16/2012	10:37	4	5 g Encore	4 C	N
'	-16	8-130-3637-001	S-128	Scil Moisture	Soil	3/16/2012	10:37	1	4 oz glass jar	4 C	.N
	-17	S-131-2223-001	S-131	TCL VOCs	Soil	3/16/2012	10:45	4	5 g Encore	4 C	N
	-17	S-131-2223-001	8-131	Soil Moisture	Soil	3/16/2012	10:45	1	4 oz glass jar	4 C	N
1	-18	S-132-4041-001	S-132	TCL VOCs	Soil	3/16/2012	10:50	4	5 g Encore	4 C	N
	-18	8-132-4041-001	8-132	Soil Moisture	Soil	3/16/2012	10:50	1	4 oz glass jar	4 C	N
工	-19	S-133-1213-001	8-133	TCL VOCs	Soil	3/16/2012	10:54	4	5 g Encore	4 C	N

Special instructions: 7 day turn around time. Please email results to Britiney. Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	items/Reason	Relinquished By	Date	Received by	Date	Time
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Page 3 of 3

Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF CUSTODY RECORD

Manafield Trail Dump Contact Name: Brittney Kelly Contact Phone: 908-565-2975 No: 2-031612-111345-0008

DateShipped: 3/16/2012 Lab: EPA DESA Laboratories 732-906-6886

	Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
120302			S-133	Soil Moisture	Soli	3/16/2012	10:54	1	4 oz glass jar	4 C	N
1	-20	8-134-0809-001	S-134	TCL VOCs	Soil	3/16/2012	11:00	4	5 g Encore	4C .	N
	-20	S-134-0809-001	S-134	Soil Moisture	Soil	3/16/2012	11:00	·:- 1	4 oz glass jar	4 C	N
.	-2	S-135-0203-001	S-135	TCL VOCs	Soll	3/16/2012	11:15	4	5 g Encore	4C	N.
1	-21	S-135-0203-001	S-135	Soil Moisture	Soil	3/16/2012	11:15	1	4 oz glass jar	4 C	N :
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Special Instructions: 7 day turn around time. Please email results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Removal Action Section

Weston Solutions, Inc., Edison, NJ EPA Contract Number: EP-W-06-072 CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 No: 2-032712-082948-0014

DateShipped: 3/27/2012

Lab: EPA DESA Laboratories Lab Phone: 732-906-6886

	Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSC
03059	-01	S-136-0103-001	S-136	TCL VOCs	Soil	3/27/2012	10:15	12	5 g Encore	4 C	Y
• 7	-01	S-136-0103-001	S-136	Soil Moisture	Soil	3/27/2012	10:15	1	4 oz glass jar	4 C	N
1 1	02	S-136-0103-002	S-136	TCL VOCs	Soil	3/27/2012	10:15	4	5 g Encore	4 C	N
	02	S-136-0103-002	S-136	Soil Moisture	Soil	3/27/2012	10:15	1	4 oz glass jar	4 C	N
	03	S-137-0103-001	S-137	TCL VOCs	Soil	3/27/2012	10:20	4	5 g Encore	4 C	N
<u> </u>	o3_	S-137-0103-001	S-137	Soil Moisture	Soil	3/27/2012	10:20	1	4 oz giass jar	4 C	N
	94	S-138-0103-001	S-138	TCL VOCs	Soil	3/27/2012	10:25	4	5 g Encore	4 C	N
100000000000000000000000000000000000000	စပ်	8-138-0103-001	S-138	Soil Moisture	Soll	3/27/2012	10:25	1	4 oz glass jar	4 C	N
1 .	<u>0</u> \$	8-139-0103-001	S-139	TCL VOCs	Soil	3/27/2012	10:30	4	5 g Encore	4C	Ň
	~ C	S-139-0103-001	S-139	Soil Moisture	Soll	3/27/2012	10:30	1	4 oz glass jar	4 C	N
]	96	S-140-0103-001	S-140	TCL VOCs	Soil	3/27/2012	10:35	4	5 g Encore	4 C	N
3	26	S-140-0103-001	S-140	Soil Moisture	Soli	3/27/2012	10:35	1	4 oz glass jar	4 C	N
	7	S-141-0103-001	S-141	TCL VOCs	Soil	3/27/2012	10:40	4	5 g Encore	4 C	N
1 4	לפ	S-141-0103-001	S-141	Soli Moisture	Soil	3/27/2012	10:40	1	4 oz glass jar	4 C	N
_	08	S-142-0103-001	S-142	TCL VOCs	Soil	3/27/2012	10:45	4	5 g Encore	4 C	N
ا ا)&- 	S-142-0103-001	8-142	Soil Moisture	Soli	3/27/2012	10:45	1	4 oz glass jar	4 C	N
_d	9	S-143-0103-001	8-143	TCL VOCs	Soll	3/27/2012	10:50	4	5 g Encore	4 C	Ņ
	29	S-143-0103-001	S-143	Soil Moisture	Soil	3/27/2012	10:50	1	4 oz glass jar	4 C	N .
	10	S-144-0103-001	S-144	TCL VOCs	Soil	3/27/2012	10:55	4	5 g Encore	4 C	N

Special Instructions: 7 day turn around time. Please email signed COC and results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Samples for analysis	PSP	3/27/12	Man	3/27/12	14.30	·		·.			
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Page 2 of 3

Removal Action Section

Weston Solutions, Inc., Edison, NJ EPA Contract Number: EP-W-06-072 CHAIN OF CUSTODY RECORD

Mansfield Trail Dump Contact Name: Britiney Kelly Contact Prione: 908-565-2975 No: 2-032712-082946-0014

SAMPLES TRANSFERRED FROM

DateShipped: 3/27/2012 Lab: EPA DESA Laboratories Lab Phone: 732-906-6886

	Lab#	Sample #	Location	Analyses.	Metrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
13059	-10	S-144-0103-001	S-144	Soil Moisture	Soil	3/27/2012	10:56	. 1	4 oz glass jar	4 C	N
	-11	S-145-0103-001	S-145	TCL VOCs	Soil	3/27/2012	11:00	4	5 g Encore	4 C	N
	_11	S-145-0103-001	8-145	Soil Moisture	Soil	3/27/2012	11:00	1	4 oz glass jar	4 C.	N
	-12	S-146-0103-001	S-146	TCL VOCs	Soil	3/27/2012	10:10	4	5 g Encore	4 C	Ν.
	12	8-146-0103-001	S-146	Soil Moisture	Soli	3/27/2012	10:10	1-	4 oz glass jar	4 C	N
	_13	S-147-0103-001	S-147	TCL VOCs	Soil	3/27/2012	10:15	4	5 g Encore	4 C	N
1. 3	13	S-147-0103-001	S-147	Soil Moisture	Soil	3/27/2012	10:15	1	4 oz glass jar	4 C	N
1	-/4	S-148-0103-001	S-148	TCL VOCs	Soil	3/27/2012	10:20	4	5 g Encore	4 C	N
	-14	S-148-0103-001	S-148	Soil Moisture	Soil	3/27/2012	10:20	1	4 oz glass jar	4 C	N
+	15	S-149-0103-001	S-149	TCL VOCs	Soll	3/27/2012	10:25	4	5 g Encore	4 C	N
	15	S-149-0103-001	S-149	Soil Moisture	Soil	3/27/2012	10:25	1	4 oz glass jar	4 C	N
	16	S-150-0103-001	S-150	TCL VOCs	Soil	3/27/2012	10:30	4	5 g Encore	4 C	N
4	16	S-150-0103-001	S-150	Soil Moisture	Soil	3/27/2012	10:30	1	4 oz glass jar	4 C	N
	17	S-151-0103-001	S-151	TCL VOCs	Soil	3/27/2012	10:35	4	5 g Encore	4 C	N .
+	-17	S-151-0103-001	S-151	Soil Moisture	Soil	3/27/2012	10:35	1	4 oz glass jar	4 C	N
+	-18	8-152-0103-001	S-152	TCL VOCs	Soll	3/27/2012	10:40	4	5 g Encore	4 C	N
-	18	S-152-0103-001	S-152	Soil Moisture	Soil	3/27/2012	10:40	. 1	4 oz glass jar	4 C	N
-	19	S-153-0103-001	S-153	TCL VOCS	Soil	3/27/2012	10:45	60, J. 4 7	5 g Encore	4 C	Ň
<u>-</u>	19	S-153-0103-001	S-153	Soil Moisture	Soil	3/27/2012	10:45	1	4 oz glass jar	4C	N

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	Special Instructions	: 7 day turn around	time. Please	email signed COC	and results to	o Brittney.K	Celly@westonsolution	s.com.	CHAIN OF CL	STODY#		
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	All samples for analysis	ZK	3/27/12	Man	3/27/12	1430					-	
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Removal Action Section

Weston Solutions, Inc., Edison, NJ EPA Contract Number: EP-W-06-072 CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 No: 2-032712-082946-0014

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY#

DateShipped: 3/27/2012 Lab: EPA DESA Laboratories

Lab Phone: 732-906-6886

	Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
7	1-20	S-154-0103-001	S-154	TCL VOCs	Soil	3/27/2012	10:50	4	5 g Encore	4 C	N
	-20	S-154-0103-001	S-154	Soil Moisture	Soii	3/27/2012	10:50	1	4 oz glass jar	4 C	N
	-21	S-155-0103-001	8- 155	TCLVOCs	Soil	3/27/2012	10:55	4	5 g Encore	4 C	N
	-21	S-155-0103-001	S-155	Soil Moisture	Soil	3/27/2012	10:55	1	4 oz glass jar	4 C	Ņ
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Special instructions: 7 day turn around time. Please email signed COC and results to Britiney. Kelly@westonsolutions.com.

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Removal Action Section

Weston Solutions, Inc. Edison, NJ EPA Contract Number: EP-W-06-072 **CHAIN OF CUSTODY RECORD**

Mansfield Trail Dump

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 No: 2-032812-152855-0016

DateShipped: 3/28/2012

Lab: EPA DESA Laboratories

Lab Phone: 732-906-6886

Leb#		Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSI
-01	S-156-0103-001	S-156	TCL VOCs	Soil	3/28/2012	14:00	4	5 g Encore	4 C	Ň
-01	8-156-0103-001	S-156	Soil Moisture	Soil	3/28/2012	14:00	1	4 oz glass jar	4 C	N
-02	S-157-2425-001	S-157	TCL VOCs	Soil	3/28/2012	14:10	12	5 g Encore	4 C	Y
_0≥	S-157-2425-001	S-157	Soll Moisture	Soil	3/28/2012	14:10	1	4 oz glass jar	4 C	N
-03	S-157-2425-002	S-157	TCL VOCs	Soil	3/28/2012	14:00	4	5 g Encore	4 C	N
-03	S-157-2425-002	S-157	Soil Moisture	Soil	3/28/2012	14:00	1	4 oz glass jar	4 C	N
-01	/ S-158-2425-001	S-1 <u>5</u> 8	TCL VOCs	Soil	3/28/2012	14:15	4	5 g Encore	4 C	N
-04	S-158-2425-001	S-158	Soil Moisture	Soil	3/28/2012	14:15	1 1	4 oz glass jar	4 C	N .
-05	S-159-2425-001	S-159	TCL VOCs	Soil	3/28/2012	14:20	4	5 g Encore	4 C	N
-05	S-159-2425-001	S-159	Soil Moisture	Soil	3/28/2012	14:20	1	4 oz giass jar	4 C	Ŋ
-06	S-160-2425-001	S-160	TCL VOCs	Sail	3/28/2012	14:25	. 4	5 g Encore	4 C	N .
-OL		S-160	Soil Moisture	Soll	3/28/2012	14:25	1	4 oz glass jar	4 C	N
-07	S-161-1617-001	S-161	TCL VOCs	Soil	3/28/2012	14:30	4	5 g Encore	4 C	N
-07	S-161-1617-001	S-161	Soil Moisture	Soil	3/28/2012	14:30	1	4 oz glass jar	4 C	N
-08	S-162-3637-001	S-162	TCL VOCs	Soil	3/28/2012	14:25	4	5 g Encore	4 C	N.
-08	S-162-3637-001	S-162	Soil Moisture	Soil	3/28/2012	14:25	1	4 oz glass jar	4 C	N
-09	S-163-3637-001	S-163	TCL VOCs	Soil	3/28/2012	14:20	4	5 g Encore	4 C	N
-09	8-163-3637-001	S-163	Soil Molature	Soil	3/28/2012	14:20	1	4 oz glasa jar	4 C	N
- 10	8-164-3837-001	S-164	TCL VOCs	Soil	3/28/2012	14:15	- 4	5 g Encore	4 C	N

Special Instructions: 7 day turn around time. Please email signed COC and results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY#

Items/Reason	Relinquished by	Date	Received by	O Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Samples for analysis a	FBH	plas / R	100	3/29/12	8:40	1			· .		
			The state of the s			e nimme der Mer ver i vende vanime dan midgelegemen op					
			·								
		,						-		 	1

Received, hard-delivered on ice @ 14.3°C @ 1722 BU 3/28/12

Page 2 of 2

Removal Action Section
Weston Solutions, Inc. Edison, NJ
EPA Contract Number: EP-W-06-072

CHAIN OF CUSTODY RECORD

Manafield Trail Dump Contact Name: Britinay Kelly Contact Phone: 908-585-2975 No: 2-032812-162855-0016

DateShipped: 3/28/2012 Leb: EPA DESA Laboratories Lab Phone: 732-908-6886

	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	M8/M8D
4-10		8-164	Soil Moisture	Soil	3/28/2012	14:15	1	4 oz glass jar	4C	N
-11	S-165-3637-001	S-165	TCL VOCe	Sali	3/28/2012	14:10		5 g Encore	4C	N
-11	8-165-3637-001	S-165	Soil Moisture	Soil	3/28/2012	14:10		4 oz glass jer	4C	N
910-	. \		λ					4.5		
			No. of the last of							1 1
	λ		N. Company					air. The state of		
	λ									
	λ		N.				No.		1000 S. A.	
	λ		N-							7.7
							RII			
		*					164			
	<u>v</u>	A	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							
100				\mathbf{X}						-74X 33
		\		N.			<u> </u>			77
					ka jiril it					
		\					F- (1)			1 1 1 1 1
						3/4/0 FASS				
				N						

Special Instructions: 7 day turn around time. Please email signed COC and results to Brittney Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM CHAIN OF GUSTODY #

Items/Reason	Relinquished by D	ate / Received by	\ Qate T	ime Items/Re	ason Relinquis	hed By Date	Received by	Date Time
All Samples	EN TE			5.78689773 5.1 82 4.366				200 11110
for analysis	CBIK T		berg 1, of 8	~40 PM	어른 사람이 회			
		 /}/// /	J 2 1 1 -			<u> </u>		
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					·禁马里。这位他	Fair Land		
**** = X								

ANALYTICAL LABORATORIES, INC.

Field Chain-of-Custody Record

Pag	of_	3
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120 RESEARCH DR. STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

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York Project No.____

೬ <u>୯೯YOUR</u> Information	Report *	Го:	Invoice To:	YOUR P	7 1	Turn-Arou	ind Time R	eport Type	Deliverbles
Company: Environmentus Restratio			Environmental	ZEO rhu erazkoù	s field Trail	RUSH - Sam	· · · · · · · · · · · · · · · · · · ·	immary Report immary w/ QA	
Address: 28 Spartu Rd	Address: 288 New	Hyde PK Rd Address:	1666 Fabick Dr	_ MT:	2-4a	RUSH - Next		T RCP Package	
Stanhape, UJ	Franklin SQ NY	Noip St.i	ouis Mobson	Purchase	Order No.	RUSH - Two	· · · · · · · · · · · · · · · · · · ·	Y ASP A Packa	
Phone No. (601) 727-3316	Phone No. (651) 775		(LSI) 775-38		5	RUSH - Thre	2	Y ASP B Packa ectronic Deliverati	-
	Attention: Karen H	PACLET Attention	: Accounts Payar	<u> </u>		RUSH - Four	E	DD (Specify Ty	
E-Mail Address: T. Williams@ERLLC.			ddress: 1 3cme	Samples from: CT_		Standard(5-7		kcel	
PRODUCTION OF THE PROPERTY OF	l Pala in a line de la	is becoming the	Volatiles 8260 full TICs	Semi-Vols. Past/PCB/Hest 8270 or 625 8082PCB F	Metals Misc. Or CRA8 TPH GRO		Common Miscelland Conssivity Nitrate	Color	Special
Samples will MOF be logge	astronastre in	nkarogna sina		STARS list 808 Pest P	P13 list TPH DRO	TCL Organics	•	Phenois	Instructions
cinek willerin beglie until an	pauestors 53.20	rkiores resolved	STARS list Nassau Co. BTEX Suffolk Co.		AL CT ETPH T15 list NY 310-13		Ignitability TKN Flash Point Tot. Nitros	Cyanide-T en Cyanide-A	Field Filtered
Λ $\Lambda = \Lambda$		Matrix Codes	MTBE Ketones	- 1	AGM list TPH 1664		Sieve Anal. Ammonia-		
Joseph F. Verend F	I 💮	S - soil Other - specify(oil, etc.)	, , , ,		UDEP list Air TO14/ otal Air TO15		Heterotrophs Chloride TOX Phosphat		
Samples Collected/Authorized	By (Signature)	WW - wastewater			Dissolved Air STARS		BTU/lb. Tot. Phos		
JOSEPHF. OVERE	•	GW - groundwater DW - drinking water		1 1	PLPCTCLP Air VPH	Part 360 country	Aquatic Tox. Oil&Gree		
Name (printed)	OGIL	Air-A - ambient air	Halog only NJDEP list App.IX list SPLP or TCLP	••	India Metala Air TICs IST Below Methane		TOC F.O.G. Asbestos pH	Total Solids TDS	٠
	.	Air-SV - soil vapor		SPIPORTCLP 608 PCB	Helium	TAGM S	Silica MBAS	TPH-1664	ainer
Sample Identification	Date/Sampled	Sample Matrix	Choose Analy	ses Needed from	the Menu Abo	ove and En	ter Below	1	iption(s)
5-001-0024-001	الا المالحواحي	Soil	TCLP-RCRA	British, voc	, SUOC, Herl	nicides, f	Peskcides	207	67,802
S-001-0024-002	balaalia/1410	Ì	Corro	ivity PH; Ignit	rability, rea	ctive cy	anida + Suf	de glass	jars
S-001-0024-002 S-002-0030-001			Corro	ivition of the state of the sta	ability, rea	ctive cy	anida+ Suf	de glass	jars
5-002-0030-001	02/12/1435	@	Corro	acity PH; 19ail	fability, rea	ctive by	anida+ Sulf	ite glass	Jars
S-003-0030-001	03/33/13/1500 03/33/13/1500		Corro	ivitilet; ignit	iability, rea	ctive by	ande + Suf	de glás	Jars
S-003-0030-001 S-003-0034-001 S-004-0018-001	02/12/1435		Corro	ivitilet; ignit	iability, rea	chie Cy	ande + Suf	A Side	Jars
S-003-0030-001 S-003-0034-001 S-005-0034-001	03/33/13/1530 03/33/13/1500 03/33/13/1530		Corro TPH-L	ivitilet; ignit	ability, rea	chie Cy	ande + Suf	of Glass	Jars
S-002-0030-001 S-003-0034-001 S-005-0034-001 S-006-0034-001	03/33/13/1530 03/33/13/1530 03/33/13/1530 03/33/13/1530		Corro	SICH PH, IGAIL	ability, rea	chie Cy	ande + Suf	of Glass	Jars
S-002-0030-001 S-003-0034-001 S-004-0018-001 S-005-0024-001 S-007-0014-001	03/33/13/15/35 03/33/13/15/30 03/33/13/15/30 03/33/13/10/48 03/33/13/110/4		Corro	SICH PH, IGAN	ability, rea	chive Cy	anda + Suf	of Glass	Jars
S-002-0030-001 S-003-0034-001 S-004-0018-001 S-005-0034-001 S-007-0014-001 S-008-0033-001	03/33/13/15/35 03/33/13/15/30 03/33/13/15/30 03/33/13/15/30 03/33/13/16/48		TFH-1	SRO + ORO				A Side	Jars
S-002-0030-001 S-003-0034-001 S-004-0018-001 S-005-0034-001 S-007-0014-001 S-008-0033-001 S-009-00310-001 Comments	03/3/13/1535 03/33/13/1530 03/33/13/1530 03/33/13/1048 03/33/13/1134 03/33/13/1134 03/33/13/1153	Preservation	4°C X Frozen	HCI MeOR	HNO,	Live Cy	NaOH		
S-002-0030-001 S-003-0034-001 S-004-0018-001 S-005-0034-001 S-007-0014-601 S-008-0033-001 S-009-00310-001	03/3/13/1535 03/33/13/1530 03/33/13/1530 03/33/13/1048 03/33/13/1134 03/33/13/1134 03/33/13/1153		4°C X Frozen	HCI MeOH	HNO, Other				Temperature
S-002-0030-001 S-003-0034-001 S-004-0018-001 S-005-0034-001 S-007-0014-001 S-008-0033-001 S-009-00310-001 Comments	03/3/13/1535 03/33/13/1530 03/33/13/1530 03/33/13/1048 03/33/13/1134 03/33/13/1134 03/33/13/1153	Preservation	Arc X Frozen	HCI MeOH	HNO, d Other	#\$0	NaOH	\$ [/:57]	
S-002-0030-001 S-003-0034-001 S-004-0018-001 S-005-0034-001 S-007-0014-001 S-008-0033-001 S-009-00310-001 Comments	03/3/13/1535 03/33/13/1530 03/33/13/1530 03/33/13/1048 03/33/13/1134 03/33/13/1134 03/33/13/1153	Preservation	4°C X Frozen	HCI MeOH	HNO, d Other		NaOH	\$ [/:57]	Temperature

YORK

Field Chain-of-Custody Record

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York Project No.____

(SHe)			Tork 8 Std. Terms & Condition	us unless superseded by written cond	act.	<u>. </u>
YOUR Information (ER) Company: Francisconnected Research	Report	To:	Invoice To:	YOUR Project ID	Turn-Around Time Re	eport Type/Deliverbles
Company: Environmental Restaction	Company: ER LLC	Compan	ER LIC	Mans Reld Trail		mmary Report
Address: 28 Sporta Rd	Address: 288 New	hale Pk By Address	: Ibble Fabrick Dr	мта-ча	I ACOSII - NEALDAY	mmary w/ QA summary TRCP Package
Stanhope, NT	Fronklin SQ, NY		ais, NO 63026	Purchase Order No.		Y ASP A Package
Phone No. (607) 727-3316	Phone No. (651)77	5-3861 Phone N	10. (651) 775-3x61	Clas		Y ASP B Package
Contact Person: Thomas Williams	Attention: Karen P	eccer Attentio	- Account Pagalde	2 81a0		otronic Deliverables: DD (Specify Type)
Contact Person: Thomas Williams E-Mail Address: Williams CERUC.Com	Attention: Karen H Komercier G E-Mail Address:	ER UC.COME-Mail	Address:	Samples from: CTNYNJ_	Standard(5-7 Days) Ex	cel
		Matéronale	\$ 8260 full TTC: 827	mi-Vols Per/PCB/Het Metals Misc 0 or 625 8082PCB RCRA8 TPH (Org. Full Lists Common Miscellane GRO Pri.Poll. Comosivity Nitrate	Ous Parameters Special
			624 Site Spec. STA	ARS list 8081Pest PP13 list TPH1		Phenois Instructions
eola ordinik tegicalite ik			SIARS HET NESSEN CO. DA	Only 8151Herb TAL CTE		Cyanide-T Field Filtered Cyanide-A Lab to Filter
1 1 -0 0		Matrix Codes		ds Only CT RCP CT15 list NY 3: I list App. IX TAGM list TPH 1		
1) (F/V) (To		S - soil		3M list Site Spec. NJDEP list Air To	D14A Part360 Route Heterotrophs Chloride	CBODs
Samples Collected/Authorized	By (Signature)	Other - specify(oil, etc.) WW - wastewater		RCP list SPLPorTCLP Total Air To		
		GW - groundwater	Arom. only 502.2 NJI	DEP list TCLP Herb SPLP or TCLP Air VE	No Diminsfrance	
JOSEPH F. OUEREN Name (printed)	977	DW - drinking water Air-A - ambient air	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	D. IX Chlordane India Metala Air Ti	Os NYCEEPSomer TOC F.O.G.	Total Solids
/ Name (printed)		Air-SV - soil vapor	App.IX list SPLParTCLP TCI 8021B list SPL	P BNA 608 Pest LIST Below Metha POTICLP 608 PCB Helium		TDS TPH-1664
Sample Identification	Date/Sampled	Sample Matrix	Choose Analyses	Needed from the Menu A	Above and Enter Below	Container Description(s)
	02-23-12/1328	Soil	TCLP-RCRA	Bretals, Voc. Svoc. L	berbicides, Peshicidas	
5-011-0036-001	02-23-13/13/50		Corrosivity P	H, ignitability re	active Cyanide + Sulfide	giass jars
•	Da-23-12/1410		1 TP	H-DRG & GRO		
S-013 - 0035·001	02-23-12/1435			· · · · · · · · · · · · · · · · · · ·		ζ.
5-014-0030-001	02-23-12/1512					
S-015-00a4-001	02-24-12/1248					·
5-016-0023-001	02-24-12/1304					
5-017-0002-001	02-24-2/319				-	
S-018-0013-00l	02-24-12/1331		Ì			
5-019-0012-001	03-24-13/1348	+	d	<u> </u>		
Comments		Preservation Check those Applicable	4°C Frozen ZnA	HCI MeOH HNO, Ascorbic Acid Other	HAO NAOH	T
Three (3) day turn a	round time	(Samples Relinquished	2/20/n 1150	lies Recorded By Date/T	
			Samples Relinquished	By Date/Time Sample	es Received in LAB by Date/T	°C

YORK

Field Chain-of-Custody Record

	Pag)	_01	_2

120 RESEARCH DR. STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166 NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

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York	Pro	ject	No.	

3112							
YOUR Information	Report	To:	Invoice To:	YOUR Project ID		eport Type/Deliverbles	
Company: ER. LLC	Company: ER, LL		ER,LIC	Mans Reid Trail		mmary Report mmary w/ QA summary	
Address: 28 Sparta 28	Address: 288 New	hade RCP Address	1666 Febrik DQ	MT2-43		FRCP Package	
Address: 00 Spairia	Franklinsa, AM	1016 St. L	our 40 630ab	Purchase Order No.	RUSH - Two Day	Y ASP A Package	
Phone No. (601) 727-3516	Phone No. (651) 775	STol Phone No	(651)775-346	1	RUSH - Three Day N	Y ASP B Package	
			Karn Mercie	8 120	ACSIL-FUMI DAY	ectronic Deliverables: DD (Specify Type)	
Contact Person: Thomas Williams E-Mail Address: Williams & Eraule.	Attention: Karen K. Hercier@El	LC.COM E-Mail A	morciole ERUCE	Samples from: CTNYNJ_X		on (specify Type)	
E-Mail Address:	E-Mail Address:	B-Mail A		emi-Vols Pen/PCB/Hart Metals Misc. O	rg. Full Lists Common Miscellane	nus Parameters Consist	
				70 er 625 8082PCB RCRAS TPH GR		Ode Special	
			1	ARS list 8081Pest PP13 list TPH DR	1 1	Phenois Instructions	
	The second secon		STARS list Nassau Co. Bi	Only 8151Herb TAL CTETP	H TAL MOOCH Ignitability TKN	Cyanide-T Field Filtered	
ងការទេសម៉ូម៉ែកភូលខេម្មប្រហារដែល <u>:</u>			BTEX Suffolk Co. Ac	ids Only CTRCP CT15 list NY 310-	13 Pull TCLP Flash Point Tot Nitroge	n Cyanide-A Lab to Filter	
		Matrix Codes		H list App. IX TAGM list TPH 166	1 1		
	7	S - soil	1	AGM list Site Spec. NJDEP list Air TO14			
Sout Tullond	<u> </u>	Other - specify(oil, etc.)	1	RCP list SPLP or TCLP Total Air TO 1:			
Samples Collected/Authorized	By (Signature)	WW - wastewater	1	List TCLP Pest Dissolved Air STAR	1 No City Indiana 1	+ · · · · · · · · · · · · · · · · · · ·	
Tuch	1	GW - groundwater	1.22.2.	DEP list TCLP Herb SPLPGTCLP Air VPH	Part 360 comment Aquatic Tox. Oil&Green		
JOSEPH F. OUEREUS Name (printed)	144	DW - drinking water Air-A - ambient air	1	pp. IX Chlordane India Metab Air TICs	NYCUEPSamez TOC F.O.G. NYSOROSamez Ashestos nH	Total Solids	
Name (printed)		Air-SV - soil vapor		ILP BNA 608 Pest LIST Below Methane LPG/ICLP 608 PCB Helium	NYSDECasser Asbestos piii TAGM Silica MBAS	TDS TPH-1664	
	T					Container	
Sample Identification	Date Sampled	Sample Matrix	Choose Analyse	s Needed from the Menu Ab	ove and Futer Reiom	-Description(s)	
5-020-0017-001	2- 24-00/1402	Soil	TUR PCRA	8 metals, voc. Svoc. Heats fignituality, reactive Cyans TPH DRO & GRE	render, Perferdo	202, 402, 802	
,			Corrosiving P	tianstability reache Count	de/50/6-80	glass jars	
5-021-0018-001	2-24-12/1415	Soil	1	TPH-DRO & GRO		4 4 4	
	`	. `					
					• •		
**							
· · · · · · · · · · · · · · · · · · ·							
		Preservation	4°C × Frozen	RCI MeOH HNO.	H.SOA NaOH		
Comments		Preservation Check those Applicable	4°C X Frozen Zn/		H,SO4 NaOH	Temperature.	
Comments			4°C X Frozen Zan	Ascorbic Acid Other		Temperature	
	and the		1) 05/0	Ascorbie Acid Other	1 2/28	/// So on Receipt	
Comments Three (3) day him are	and the		4°C X Frozen Zan	Ascorbie Acid Other		on Receipt	
	and the		1) 05/0	Ascorbic Acid Other 2/28/12/13/0 By Date/Time Sample	1 2/28	ime C	

YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

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Pagec	þf	2
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York Project No.

		signature binds you	o York's Std. Terms & Condition	ns unless superseded by written contra	ict.	•
YOUR Information	Repor	t To:	Invoice To:	YOUR Project ID	Turn-Around Time R	eport Type/Deliverbles
(Site) Company: Environmental Restrict Address: 28 Sept 88	Company: ER, L	LC Comp	any: ER, LLC	Mansfield Trail		ummary Report
Address: 28 Sparts Rd	Address: 288 Alex	whyde PK Rolan	ss: 1666 Fabick Or	MTa-42		ummary w/ QA summary
Stanhope, NJ	Franklin SQ.	MI HOID ST	Louis MO \$30 al	Purchase Order No.		T RCP PackageY ASP A Package
Phone No. (607) 727-3316	Phone No. (651) 77		No. 7 Same		RUSH - Three Day	Y ASP B Package
Contact Person: Thomas Williams	Attention: Karen	Hercier Mon	ion: Accounts Payable	8120		estronic Deliverables: DD (Specify Type)
E-Mail Address: T. W. Iliams @ ERLLC.	UFMail Address:	E-Ma	Address: Same	1		xcel
Print Clearly and Legibly. A	ll Information	must be comple	Volatiles Se	mi-Vols PessPCB/Hert Metals Misc. 0 or 625 8082PCB RCRA8 TPH G		SDECIZI
Samples will NOT be logge	d in and the	turn-around tin	1e 624 Site Spec. ST.	0 or 625 8082PCB RCRA8 TPH G ARS list 8081Pest PP13 list TPH D		Color Instruction:
clock will not begin until any	y questions by	York are resolve	d STARS list Nassan Co. EN	Only 8151Herb TAL CTET	PH TAL MOOCN Ignitubility TKN	Cyanide T Field Filtered [
4		Matrix Codes		ds Only CTRCP CT15 list NY 310		
the II A		S - soil	TCL list Oxygerates TA	GM list Site Spec. NJDEP list Air TO		
Samples Collected/Authorized	Ry (Signatura)	Other - specify(oil, a WW - wastewater		RCP list SPLPorTCLP Total Air TO		to BOD28
		GW - groundwate	1 1	L list TCLP Pest Dissolved Air STA DEP list TCLP Herb SPLP or TCLP Air VPH	No Dipatro Lucito	
Thomas WWII	1 som	DW - drinking wa		. IX Chlordane Inthe Metals Air ITC	[Pall 3.im	sc TSS Total Solids
Name (printed)		Air-A - ambient air Air-SV - soil vapor	App.IX list SPLPorTCLP TC		1 1	TDS
Sample Identification	Data Sampled			POTICLE 608 PCB Helium	TAGM Silien MDAS	TPH-1664 Container
Cample Identification	Date Sampled		Loco-ton	Needed from the Menu A	bove and Enter Below	Description(s)
S-022-0018-001	3/3/12 0911	Soil	Area D/Trench	IL TCLP (RCRAB	metals, voc, svoc)	202, 402, 802
S-023-0038-001	092		Area D/Trench I No	and Total (VOC, SUOC	, RCRA 8 metals)	Class Jaks
5-024-0028-001	0945	5	Area D/Trench I was	th Herbicides and	Pasticides (TCLP)	3
5-025-00210-001	0958			ter Scarrosivity, ptt,	•	
5-026-0022-001	1010		Area DITrench Cen			
S-027-0024-001	1620		Area D/Trench I Cent	1/	ALL	
S-028-0024-001	1033		Area Ditrenchi Sa		SAMPLE	7
S-029-0022-001	1042		Area DiTrench 1 South		AU	7
S-030-0027-001	1103	_	Area DITTERCHISON			
S-031-00 3 4-001	v 1355	l l	Area DITrencha So		- Analysis	
Comments		Preservation	4°C_X Frozen	HCI MeOH HNO.	H,SO NaOH	V
Three (3) day town a	Karas	Check those Applicab				Temperatur
Trice (s) day total a	100100			2/412 1415		on Receipt
			Samples Relinquished	By Date/Time Sample	es Received By Date/T	
					,	····-
· ·		•	Samples Relinquished	- 3/Win 145	•	~°C

Field Chain-of-Custody Record

Page Q of Q

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120 RESEARCH DR. STRATFORD, CT 06615

Field Chain-of-Custody Record

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YOUR Information	Report 1	To:	Invoice To:		roject ID	Turn-Arou	ınd Time	Report	Type
SITE Environmental Restocate	Company: ER, LL	C Compa	my: ER, UC	Mansfel	d Trail	RUSH - Sam	e Day 📋	Summary Report	
Address: 28 Sparta Rd	Address:	Addre	ss: Ibbbb Faloick	Dr MTa	-ປລ	RUSH - Nex	Day	Summary w/ QA	
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	Phone No. 860-791			815	373	RUSH - Thr	٠ اــــا	NY ASP A Packa NY ASP B Packa	
Contact Person: Thomas Williams.	Attention: Andrew C	harrette Attent	ion: Accounts flug	اعلا		RUSH - Fou	r Day	NJDEP Red. Del	
Contact Person: Thomas Williams T. Williams & ERLLC. Com E-Mail Address:	a charrene &	Zeeuc.com -	ion: Accounts Rug	Samples from: CT	NY NJ	Standard(5-	7 Days)	Electronic Data D	
			8.7. 8.2.4.1	Semi-Vols, Pen/PCB/Herb	Metals Misc. O		Misc.	Simple Excel	arvergores (EDD)
Print Clearly and Legibly. A			e. 8260 full TICs		RCRA8 TPH GR		Corrosivity	NYSDEC EQUIS	3
Samples will NOT be logge	ed in and the tu	rn-around tin		1 ' 1	PP13 list TPH DR	O TCL Organics	Reactivity	EQuIS (std)	
clock will not begin until any	auestions by Vo	rk are resolve	A. STARS list Nassau Co.	1 , 1	TAL CT ETPI		gnitability	EZ-EDD (EQuis)	
<i>/</i> /		عرقي الأمم أمست إلى التي أستر	E BIEN SUROR CO.	1 1	CT15 list. NY 310-		Flash Point	NJDEP SRP Haz	Site EDD
الرابك		Matrix Codes S - soil	MTBE Ketones TCL list Oxygenatus	1 1	TAGM list TPH 166 NJDEP list Air TO14	1 1	Sieve Anal	GIS/KEY (std)	
72 05		Other - specify(oil, e		TAGM list Site Spec. CT RCP list SPLP or TCLP			• .	Other	
Samples Collected/Authorized	By (Signature)	WW - wastewater	CT RCP list 524.2	TCL list TCLP Pest	Dissolved Air STAR			York Regulatory	
	Ä .	GW - groundwate		1 1 1	SPLP or TCLP Air VPH	Part 360 Common		Excel Spreadsheet Compare to the following I	Pares (planes 611 m)
Lous D. Com	لمكنو	DW - drinking wa	ter Halog only NJDEP list	App. IX Chlordane	India Mirate Air TICs		гос	CONTRACTOR DE TORNWING	ceges (puesase no m):
Name (printed)		Air-A - ambient air Air-SV - soil vapor	App. IX list SPLP or TCL		LIST Below Methane	NYSDECsener	Asbestos		
			8021B list	SPLPOTTCLP 608 PCB	Helium		Silica		
		l Commis Makel	v I. Chassa Amal				4 T) - I	Conta	iner
Sample Identification	Date Sampled	Sample Matri	Choose Anai	yses Needed from	the Menu At	ove and En	ter Below	Descrip	tion(s)
		Soil		<u> </u>				Descrir	
MTD-OUIDIA-AGAD-O	4/12/12		Fotal (Voc., SV	OC, RORA 8 met			steides)	Gluss jar	1607
•	4/12/12	Soil	Fotal (Voc., SV	<u> </u>			steides)	Descrir	1607
MTD-OUIZIA-ARAD-O	4/12/12	Soil	Fotal (Voc., SV	OC, RORA & MANNE FULL TELP	s, PCBs, He		steides)	Gluss jar	1607
MTD-OUIZIA-ARAD-O	4/12/12	Soil	Fotal (Voc., SV	FUIL TELP Amalysis	s, PCBs, He		steides)	Gluss jar	1607
MTD-OUIZIA-ARAD-O	4/12/12	Soil	Fotal (Voc., SV	OC, RORA & MANNE FULL TELP	s, PCBs, He		steides)	Gluss jar	1607
MTD-041212-Arab-03 MTD-041212-Arab-03	4/12/12	Soil	Fotal (Voc., SV	FUIL TELP Amalysis	s, PCBs, He		steides)	Gluss jar	1607
MTD-OUIDIA-AGAD-O	4/12/12 4/12/12	Soil	Fotal (Voc., SV	FUIL TCLP Analysis- Savn	s, PCBs, He foe Both plen,		steides)	Gluss jar	02
MTD-041212-Arab-03 MTD-041212-Arab-03	4/12/12 4/12/12	Soil	Fotal (Voc., SV	FUIL TELP Amalysis	s, PCBs, He foe Both plen,	bicido, Pr	steides)	Offices For 116	02
MTD-041212-Arab-03 MTD-041212-Arab-03	4/12/12 4/12/12	Soil	Fotal (Voc., SV	FUIL TCLP Analysis- Savn	s, PCBs, He foe Both plen,	bicido, Pr	steides)	Offices For 116	02
MTD-041212-Arab-03 MTD-041212-Arab-03	4/12/12 4/12/12	Soil	Fotal (Voc., SV	FUIL TCLP Analysis- Savn	s, PCBs, He foe Both plen,	bicido, Pr	steides)	Offices For 116	02
MTD-041212-Arab-03 MTD-041212-Arab-03	4/12/12 4/12/12	Soil	Fotal (Voc., SV	FUIL TCLP Analysis- Savn	s, PCBs, He foe Both plen,	bicido, Pr	steides)	Offices For 116	02
MTD-041212-ARAD-03 MTD-041212-ARAD-03	4/12/12 4/12/12	Soil	Fotal (Voc., SV	FUIL TCLP Analysis- Savn	s, PCBs, He for Both plan.	biudo, Pr	ste idas)	Offices For 116	02
MTD-041212-Arab-03 MTD-041212-Arab-03	4/12/12 4/12/12	Soil Soil Preservation Check those Applicab	Total (Voc., SV AND)	Amalysis-	s, PCBs, He for Both plan,	bicido, Pr	steides)	Descrite Gluss in [16	02
MTD-041212-ARAD-03 MTD-041212-ARAD-03 Comments	4/12/12 4/12/12	Soil Soil Preservation Check those Applicab Special	Total (Voc., SV AND)	Amalysis - Saving Hitz Meon ZnAc Ascorbic Ac	s, PCBs, He for Both plan,	biudo, Pr	ste idas)	Descrite Gluss in [16	Temperature
MTD-041212-ARAD-03 MTD-041212-ARAD-03 Comments	4/12/12 4/12/12	Preservation Check those Applicab Special Instructions	Total (Voc., SU ANID)	Amalysis - Savma HCI Meoli ZnAc Ascorbic Ac	s, PCBs, Her foe Both plen, H_ HNO, id Other	H.SO.	(NaOH	Descrite Gluss you 16	02
MTD-041212-ARAD-03 MTD-041212-ARAD-03	4/12/12 4/12/12	Preservation Check those Applicab Special Instructions Field Filtered	Total (Voc., SV AND)	Amalysis - Savma HCI Meoli ZnAc Ascorbic Ac	s, PCBs, Her foe Both plen, H_ HNO, id Other	H,SO,	NaOH_	Objection Description Description Control Desc	Temperature on Receipt
MTD-041212-ARAD-03 MTD-041212-ARAD-03 Comments	4/12/12 4/12/12	Preservation Check those Applicab Special Instructions	Total (Voc., SU ANID)	Amalysis - Savm Hal Meol ZnAc Ascorbic As Hall Date/Tir	s; PCBs, Her fore Both Olan H HNO, id Other ne Sample	H.SO.	NaOH	Descrite Gluss you 16 Allows you 16	Temperature

Attachment B-4:

NJDEP Soil Cleanup Criteria

		Residential Direct Contact Soil Cleanup	Non-Residential Direct Contact Soil Cleanup	departs (cand) will sequence
Contaminant	CASRN	Criteria (a) (b)	Criteria (a) (b)	(Criticalicus) (IGWSCC)
Acenaphthene	83-32-9	3400	10009(c)	100
Acetone (2-propanone)	67-64-1	1000(d)	1000(d)	100
Acrylonitrile	107-13-1	1000(a)	1000(0)	1
Aldrin	309-00-2	0.04	0.17	50
Anthracene	120-12-7	10000(c)	10000(c)	100
Antimony	7440-36-0	14	340	(b)
Arsenic	7440-38-2	20 (e)	20 (e)	(h)
Barjum	7440-39-3	700	47000(n)	(h)
Benzene	71-43-2	3	13	1
Benzo(b)fluoranthene (3,4-Benzofluoranthene)	205-99-2	0.9	4	50
Benzo(a)anthracene (1,2 Benzanthracene)	56-55-3	0.9	4	500
Benzo(a)pyrene (BaP)	50-32-8	0.66(f)	0.66(f)	100
Beazo(k)finoranthene	207-08-9	0.9	4	500
Benzyt Alcohol	100-51-6	10000(c)	10000(c)	50
Beryllium	7440-41-7	[1(f)] 2 (e)	[1(f)] 2 (e)	(h)
Bis(2-chloroethyl) ether	111-44-4	0.66(f)	3	10
Bis(2-chloroisopropyl)ether	108-60-1	2300	10000(c)	10
Bls(2-ethylhexyl) phthalate	117-81-7	49	210	100
Bromodichloromethane (Dichlorobromomethane)	75-27-4	11	46	1
Bremeform	75-25-2	. 86	370	1
Bromomethane (Methyl bromide)	74-83-9	79	1000 (d)	- i
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	1000 (d)	1000 (d)	50
Butylbenzyl phthalate	85-68-7	1100	10000 (c)	100
Cadmium	7440-43-9	[1] 39	100	(h)
Carbon tetrachloride	56-23-5	2 (k)	4 (k)	Y Y
4-Chloroaniline (p-Chloroaniline)	106-47-8	230	4200	(r)
Chlorobenzene_	108-90-7	37	680	i i
Chloroform	67-66-3	19 (k)	28 (k)	1
4-Chloro-3-methyl phenol (p-Chloro-m-cresol)	59-50-7	10000 (c)	10000 (c)	100
Chloromethane (Methyl chloride)	74-87-3	520	1000 (d)	/ 10
2-Chlorophenol (o-Chlorophenol)	95-57-8	280	5200	10
Chromium - hexavalent (VI)	18540-29-9	240; 270 (g); (i)	6100; 20 (g); (i)	(b)
Chromium - trivalent (III)	16065-83-1	120,000	<u>(i)</u>	(1)
Chrysene	218-01-9	9	40	500
Copper	7440-50-8	600 (m)	600 (m)	(h)
Cyanide	57-12-5	1100	21000 (o)	(h)
4,4'-DDD (p,p'-TDE)	72-54-8	3	12	50
4,4'-DDE (p,p'-DDX)	72-55-9	2	9	50
4,4'-DDT	50-29-3	2	9	500
Dibenz(a,h)anthracene	53-70-3	0.66 (f)	0.66 (f)	100
Dibromochloromethane (Chlorodibromomethane)	124-48-1	110	1000 (d)	1
Di-n-butyl phthalate	84-74-2	5700	10000 (c)	100
Di-n-octyl phthalate	117-84-0	1100	10000 (c)	100
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	5100	10000 (c)	_50
1,3-Dichlorobenzene (m -Dichlorobenzene)	541-73-1	5100	10000 (c)	100
1.4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	570	10000 (c)	100
3,3'-Dichlorobenzidine	91-94-1	2	6.	100
1,1-Dichloroethane	75-34-3	570	1000 (d)	10
1,2-Dichloroethane	107-06-2	6	24	1
1,1-Dichloroethene	75-35-4	8	150	10
1,2-Dichloroethene (trans)	156-60-5	1000 (d)	1000 (d)	50
1,2-Dichloroethene (cis)	156-59-2	79	1000 (d)	1
2,4-Dichlorophenol	120-83-2	170	3100	10
1,2-Dichloropropane	78-87-5	10	43	(r)

- (a) Criteria are health based using an incidental ingestion exposure pathway except where noted below.
- (b) Criteria are subject to change based on site specific factors (e.g., aquifer classification, soil type, natural backgr
 (c) Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.
- (d) Health based criterion exceeds the 1000 mg/kg maximum for total volatile organic contami
- (e) Cleanup standard proposal was based on natural background.
- (f) Health based criterion is lower than analytical limits; cleanup criterion based on practical quantitation level.
- (g) Criterion based on the inhalation exposure pathway.
- (h) The impact to ground water values for inorganic constituents will be developed based upon site specific chemical and physical papameters.

 (i) Site specific determination required for SCC for the allergic contact demantitis exposure pathway.
- (i) Contaminant not regulated for this exposure pathway.
- (k) Criteria based on inhalation exposure pathway, which yielded a more stringent criterion than the incidental ingestion exposure pathway. (I) No criterion derived for this contaminant.
- (m) Criterion based on ecological (phytotoxicity) effects.
- (n) Level of the human health based criterion is such that evaluation for potential environmental impacts on a site by site basis is recom
- (o) Level of the criterion is such that evaluation for potential acute exposure hazard is recommended.
- (p) Criterion based on the USEPA Integrated Exposure Uptake Biokinetic (IEUBK) model utilizing the default parameters. The concentration is considered to protect 95% of target population (children) at a blood lead level of 10 ug/dl.

Attachment B-5:

Laboratory Validated Data Packets

Attachment C

PERIMETER/EXCAVATION AIR SAMPLING TRIP REPORT

SAMPLING EVENT:

Perimeter/Excavation Air Sampling Event

SAMPLE DATES:

March 13 to April 12, 2012

1.0 Removal Action Sampling Event Summary:

From March 13 to April 12, 2012, as part of the U.S. Environmental Protection Agency (EPA) Removal Action, Weston Solutions, Inc., Removal Support Team 2 (RST 2) collected a total of 73 air samples, including 14 field blanks, for target compound list (TCL) volatile organic compound (VOC) analysis in accordance with the site-specific Community Air Monitoring Plan (CAMP). Sampling activities were conducted in accordance with EPA Method TO-17 for VOC analysis. As specified in the site-specific health and safety plan, during the sampling event, modified Level D personal protective equipment was worn; including Latex boot covers, gloves, protective eyewear, hard hat, and high visibility safety vest.

2.0 Sample Collection Information:

The following figures and tables provides summaries of the sample collection: Attachment C-1:

- Figure 10 Air Monitoring Stations
- Figure 11 Air Sampling Stations for 03/13/12 03/19/12
- Figure 12 Air Sampling Stations for 03/22/12 03/28/12
- Figure 13 Air Sampling Stations for 03/29/12 04/12/12

Attachment C-2:

- Table 8. Air Sample Collection Information
- Table 9. Weather Condition Information for Air Sampling

Table 3-1: Air Station Locations Summaries the air station identification numbers and their location used during air sampling.

3.0 Sampling Methodology:

In order to assess ambient air conditions for VOCs, air stations were established around the periphery of active excavation areas to assess potential impact to off-site areas (i.e. residences). Table 3-1 identifies all established air stations and their location on site and Figure 10 in Attachment C-1 depicts the location of each air sample.

At the EPA On Scene Coordinator's (OSC's) discretion, air samples were also collected during excavation and load-out activities at the Site and analyzed for VOCs via the EPA TO-17 Method. The OSC also made the determination when air samples no longer need to be collected in an area; if results are consistently below action levels or material removal was completed in that area. Air sampling was not conducted when humidity was greater than 80% or when the ground was sufficiently moist following a rain event.

The perimeter air samples were collected using air-sampling SKC pumps with low-flow meters as outlined in Table 3-2. The air samples were shipped overnight to an analytical laboratory for VOC analysis via EPA Method TO-17.

Table 3-1: Air Station Locations

Air Area		GPS L	ocation	Air	. Area	GPS Location		
Station	Location	Lat	Long	Station	Location	Lat	Long	
AA-000	Trailer	40.9289443	-74.6995999	AA-011	Area D	40.928829154	-74.69849562	
AA-001	Area A	40.928811398	-74.69939583	AA-012	Area E	40.9279432	-74.69870183	
AA-002	Area A	40.928933946	-74.699735022	AA-013	Area B	40.92773744	-74.69910042	
AA-003	Area A	40.928688507	-74.699791542	AA-014	Area B	40.927540333	-74.69900797	
AA-004	Area D	40.92877892	-74.698195177	AA-015	Area C	40.92773320	-74.69870186	
AA-005	Area D	40.92926838	-74.697875458	AA-016	Area D	40.929093864	-74.69802289	
AA-006	Area D	40.929492812	-74.698092717	AA-017	Area D	40.928717804	-74.69836521	
AA-007	Area D	40.92879148	-74.698617266	AA-018	Area D	40.929357089	-74.69768848	
AA-008	Area D	40.92923201	-74.697636255	AA-019	Area D	40.929152213	-74.69808214	
AA-009	Area E	40.927961174	-74.698284849	AA-020	Area E	40.929522613	-74.69834424	
AA-010	Area D	40.92900101	-74.697704075		,			

Table 3-2: TO-17 Methods Sampling Procedures

Analyte	Sampling Method	Sampling Media	Recommended Flow Rate ^{1*}	Total Volume	Action Level ^{2*}
VOCs	TO-17	Thermal Desportion Tube	0.1000 Liters per min	4 Liters	0.079 ppb _v ³*

Notes 1* Actual flow rate was determined in the field based on prevailing Site conditions. Humid conditions and precipitation events on Site may require air sampling activities for the day to be cancelled. 2* The action level for TCE is from the Risk-Based Air Concentration Table; Mid-Atlantic Risk Assessment; US EPA. The complete table can be found in Validated Data Tables in Attachment C-5. 3* ppb_v = Parts per Billion by Volume

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duties
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample Collection, Sample Management, Site Health and Safety
Sean Hettinger	RST 2, Region II	Sample Collection
Mark Conover	RST 2, Region II	Sample Collection

5.0 Laboratory Information:

Sample Matrix	No. of Samples	Analyses	Analyses Method	Laboratory
Air	73	TCL VOCs	TO-17	Columbia Analytical Services, Inc. 2655 Park Center Drive, Suite A SimiValley, CA 93065
				2/

6.0 Sample Dispatch Data:

From March 13 to April 12, 2012, RST 2 delivered air samples via FedEX to Columbia Analytical Services, Inc. laboratory in Simi Valley, California for TCL VOC analyses. Table 3-1 lists the dates shipped, the Airbill Number, and the Chain of Custody (COC) Record Number for the samples that were relinquished to the lab.

Refer to Attachment C-3 for the COC's and Attachment C-4 for the FedEx Airbills.

Table 6-1: Dispatch Information

Table VI. Dispace information										
Date	No. of Samples	FedEx Airbill	Chain of Custody Record Number	Laboratory Shipped To						
03/13/12	6	8750 9486 5551	2-031312-173304-0002							
03/14/12	6	8640 4833 1689	2-031412-194515-0005							
03/15/12	6	8750 9486 5768	2-031512-182913-0007	<u>'</u>						
03/19/12	6	8640 4833 1690	2-03912-170842-0010							
03/22/12	4	8640 4833 1704	2-032212-140609-0011							
03/23/12	6	8578 5254 5102	2-032312-124758-0012							
03/26/12	6	8578 5254 5113	2-032612-134722-0013	Columbia Analytical Services, Inc.						
03/27/12	6	8739 8176 0011	2-032712-152046-0015	2655 Park Center Drive, Suite A						
03/28/12	6	8739 8176 0022	2-032812-165122-0017	SimiValley, CA 93065						
03/29/12	5	8739 8176 0033	2-032912-172441-0019]						
03/30/12	.5	8739 8176 0044	2-033012-135904-0020							
04/03/12	6	8739 8176 0055	2-040312-162203-0021							
04/10/12	6	8739 8176 0066	2-041012-145759-0022	1						
04/11/12	5	8739 8176 0077	2-041112-113436-0023	1						
04/12/12	5	8739 8176 0088	2-041212-171459-0024	1						

7.0 Analytical Results

All results from air sampling were below the criteria specified in the Site Specific CAMP. The activities conducted on site and the results above non-detect for each day sampled are listed below.

Tuesday, March 13, 2012:

- AA-001-031312-001: Dichlorofluromethane (0.37 ppb_v), Trichlorofluormethane (0.14 ppb_v), cis-1,2-Dichloroethene (0.13 ppb_v)
- AA-001-031312-002: Dichlorofluromethane (0.38 ppb_v), Trichlorofluormethane (0.15 ppb_v)
- AA-002-031312-001: no compounds above detection limits
- AA-002-031312-002: Dichlorofluromethane (0.10 ppb_v)
- AA-003-031312-001: Dichlorofluromethane (0.14 ppb_v), cis-1,2-Dichloroethene (0.16 ppb_v), Trichloroethene (0.10 ppb_v)

Wednesday, March 14, 2012:

- AA-000-031412-001: Dichlorofluromethane (0.30 ppb_v), Trichlorofluoromethane (0.11 ppb_v)
- AA-001-031412-001: Acetone (1.3 ppb_v)
- AA-002-031412-001: no compounds above detection limits
- AA-004-031412-001: Dichlorofluromethane (0.13 ppb_v)
- AA-005-031412-001: Dichlorofluromethane (0.31 ppb_v), Trichlorotriflouroethane (0.11 ppb_v)

Thursday, March 15, 2012:

- AA-006-031512-001: no compounds above detection limits
- AA-007-031512-001: no compounds above detection limits
- AA-008-031512-001: no compounds above detection limits

Monday, March 19, 2012:

- AA-009-031912-001: no compounds above detection limits
- AA-010-031912-001: Dichlorofluromethane (0.22 ppb_v)
- AA-009-031912-001: no compounds above detection limits

Thursday, March 22, 2012:

- AA-012-032212-001: Toluene (0.22 ppb_v), Chlorobenzene (0.13 ppb_v), n-Decane (0.095 ppb_v)
- AA-013-032212-001: Toluene (0.21 ppb_v)
- AA-014-032212-001: Toluene (0.38 ppb_v), Chlorobenzene (0.19 ppb_v), n-Decane (0.083 ppb_v)

Friday, March 23, 2012:

- AA-009-032312-001: Trichlorofluoromethane (0.23 ppb_v), 2-Butanone (0.18 ppb_v), cis-1,2-Dichloroethene (0.24 ppb_v), Trichloroethene (0.15 ppb_v), 1,1,2-Trichloroethane (0.47 ppb_v), Chlorobenzene (0.42 ppb_v), 3-Ethyltoluene (0.17 ppb_v), 1,2,4-Trimethylbenzene (0.27 ppb_v), 1,4-Dichlorobenzene (0.42 ppb_v), 1,2-Dhichlorobenzene (2.4 ppb_v), 1,2,4-Trichlorobenzene (0.092 ppb_v)
- AA-014-032312-001: 1,2-Dhichlorobenzene (0.12 ppb_v)
- AA-015-032312-001: Acetone (2.0 ppb_v), 1,2-Dhichlorobenzene (0.11 ppb_v)

Monday, March 26, 2012:

- AA-005-032612-001: no compounds above detection limits
- AA-011-032612-001: Dichlorobenzene (0.11 ppb_v)
- AA-016-032612-001: no compounds above detection limits
- AA-017-032612-001: no compounds above detection limits

Tuesday, March 27, 2012:

- AA-006-032712-001: no compounds above detection limits
- AA-009-032712-001: n-Hexane (0.17 ppb_v), Toluene (0.34 ppb_v), n-Octane (0.11 ppb_v), Chlorobenzene (0.17 ppb_v), n-Decane (0.24 ppb_v), 1,2-Dhichlorobenzene (0.17 ppb_v)
- AA-017-032712-001: Dichlorofluromethane (0.096 ppb_v), 1,2-Dhichlorobenzene (0.096 ppb_v)
- AA-018-032712-001: no compounds above detection limits

Wednesday, March 28, 2012:

- AA-006-032812-001: no compounds above detection limits
- AA-010-032812-001: no compounds above detection limits
- AA-016-032812-001: no compounds above detection limits

Thursday, March 29, 2012:

- AA-009-032912-001: no compounds above detection limits
- AA-010-032912-001: acetone (1.9 ppb_v), Toluene (0.15 ppb_v), n-Decane (0.25 ppb_v)
- AA-017-032912-001: no compounds above detection limits
- AA-018-032912-001: Dichlorofluromethane (0.17 ppb_v), Chloroethane (2.0 ppb_v), Benzene (0.25 ppb_v), Toluene (0.25 ppb_v), n-Decane (0.42 ppb_v)

Friday, March 30, 2012:

- AA-000-033012-001: Dichlorofluromethane (0.11 ppb_v)
- AA-009-033012-001: Dichlorofluromethane (0.10 ppb_v), n-Hexane (0.92 ppb_v), Bromodichloromethane (0.23 ppb_v), 1,1,2-Trichloromethane (0.23 ppb_v), Chlorobenzene (0.24 ppb_v), m,p-Xylenes (0.26 ppb_v), o-Xylene, (0.17 ppb_v), n-Nonane (0.12 ppb_v), n-Propylbenzene (0.25 ppb_v), 3-Ethyltoluene (0.79 ppb_v), 4-Ethyltoluene (0.37 ppb_v), 1,3,5-Trimethylbenzene (0.56 ppb_v), 2-Ethlytoluene (0.35 ppb_v), 1,2,4-Trimethylbezene (1.9 ppb_v), n-Decane (0.39 ppb_v), 1,4-Dichlorobenzene (0.091 ppb_v), 1,2,3-Trimethylbezene (0.047 ppb_v), 1,2,4-Trichlorobenzene (0.41 ppb_v)
- AA-010-033012-001: no compounds above detection limits
- AA-018-033012-001: Dichlorofluromethane (0.10 ppb_v), cis-1,2-Dichloroethane (0.20 ppb_v), Trichloroethene (0.094 ppb_v),), n-Propylbenzene (0.19 ppb_v), 1,3,5-Trimethylbenzene (0.14 ppb_v), 1,2,4-Trimethlybezene (0.46 ppb_v), 1,2,3-Trimethylbezene (0.11 ppb_v)

Tuesday, April 3, 2012:

• AA-011-040312-001: Dichlorofluromethane (0.24 ppb_v), Vinyl Chloride (0.26 ppb_v), cis-1,2-Dichloroethane (0.92 ppb_v), Trichloroethene (0.12 ppb_v), Toluene (0.16 ppb_v), Chlorobenzene (0.22 ppb_v), o-Xylene, (0.55 ppb_v) n-Nonane (0.092 ppb_v), Cumene (0.34 ppb_v), n-Propylbenzene (0.85 ppb_v), 3-Ethyltoluene (2.1 ppb_v), 4-Ethyltoluene (0.87 ppb_v), 1,3,5-Trimethylbenzene (1.1 ppb_v), 2-

- Ethlytoluene (0.84 ppb_v), 1,2,4-Trimethlybezene (3.8 ppb_v), n-Decane (0.29 ppb_v), 1,4-Dichlorobenzene (0.12 ppb_v), 1,2,3-Trimethylbenzene (0.94 ppb_v), 1,2-Dichlorobenzene (0.59 ppb_v)
- AA-017-040312-001: cis-1,2-Dichloroethane (0.19 ppb_v), n-Propylbenzene (0.12 ppb_v), 3-Ethyltoluene (0.30 ppb_v), 4-Ethyltoluene (0.13 ppb_v), 1,3,5-Trimethylbenzene (0.16 ppb_v), 2-Ethlytoluene (0.12 ppb_v), 1,2,4-Trimethlybezene (0.55 ppb_v), 1,2,3-Trimethylbenzene (0.13 ppb_v)
- AA-017-040312-002: 3-Ethyltoluene (0.13 ppb_v), 1,2,4-Trichlorobenzene (0.30 ppb_v)
- AA-018-040312-001: Acetone (1.1 ppb_v)
- AA-019-040312-001: Dichlorofluromethane (0.17 ppb_v), Vinyl Chloride (0.27 ppb_v), Acetone (0.15 ppb_v), cis-1,2-Dichloroethane (2.0 ppb_v), Trichloroethene (0.18 ppb_v), Toluene (0.56 ppb_v), n-Octane (0.23 ppb_v), Chlorobenzene (0.96 ppb_v), Ethylbenzene (0.12 ppb_v), m,p-Xylenes (0.52 ppb_v), o-Xylene, (1.2 ppb_v) n-Nonane (0.67 ppb_v), Cumene (0.81 ppb_v), n-Propylbenzene (2.6 ppb_v), 3-Ethyltoluene (7.9 J ppb_v), 4-Ethyltoluene (3.5 ppb_v), 1,3,5-Trimethylbenzene (4.7 ppb_v), 2-Ethlytoluene (3.5 ppb_v), 1,2,4-Trimethlybezene (18 J ppb_v), n-Decane (2.0 ppb_v), 1,4-Dichlorobenzene (0.29 ppb_v), 4-Isopropyltoluene (0.42 ppb_v), 1,2,3-Trimethylbenzene (4.2 ppb_v), 1,2-Dichlorobenzene (1.2 ppb_v), Naphthalene (0.14 ppb_v)

Tuesday, April 10, 2012:

- AA-010-041012-001: Acetone (1.3 ppb_v), n-Hexane (0.15 ppb_v), n-Octane (0.12 ppb_v), n-Decane (0.31 ppb_v)
- AA-010-041012-002: Acetone (2.3 ppb_v), n-Hexane (0.77 ppb_v)
- AA-017-041012-001: Acetone (1.8 ppb_v), n-Hexane (0.15 ppb_v), Toluene (0.12 ppb_v), n-Octane (0.20 ppb_v), n-Decane (0.46 ppb_v)
- AA-017-041012-002: Trichloroethene (0.098 ppb_v)
- AA-018-041012-001: Dichlorofluromethane (0.095 ppb_v), Acetone (1.2 ppb_v), cis-1,2-Dichloroethene (1.7 ppb_v), n-Hexane (0.21 ppb_v), Trichloroethene (0.72 ppb_v), Toluene (0.31 ppb_v), n-Octane (0.15 ppb_v), Chlorobenzene (0.46 ppb_v), 3-Ethyltoluene (0.21 ppb_v), 4-Ethyltoluene (0.11 ppb_v), 1,3,5-Trimethylbenzene (0.15 ppb_v), 2-Ethlytoluene (0.11 ppb_v), 1,2,4-Trimethylbenzene (0.49 ppb_v), n-Decane (0.31 ppb_v), 1,4-Dichlorobenzene (0.17 ppb_v), 1,2,3-Trimethylbenzene (0.16 ppb_v), 1,2-Dichlorobenzene (0.71 ppb_v)

Wednesday, April 11, 2012:

- AA-010-041112-001: Acetone (1.3 ppb_v), n-Hexane (0.77 ppb_v), n-Decane (0.46 ppb_v)
- AA-011-041112-001: Dichlorofluromethane (0.29 ppb_v), Acetone (1.3 ppb_v), Trichlorofluoromethane (0.12 ppb_v), Methylene Chloride (0.61 ppb_v), 1,1-Dichloroethane (0.49 ppb_v), 2-Butanone (0.17 J ppb_v), cis-1,2-Dichloroethene (13 J ppb_v), n-Hexane (0.20 ppb_v), Chloroform (0.24 ppb_v), Trichloroethene (8.0 J ppb_v), Toluene (1.9 ppb_v), Tetrachloroethene (2.5 ppb_v), o-Xylene (0.11 ppb_v), n-Nonane (0.14 ppb_v), n-Propylbenzene (0.11 ppb_v), 3-Ethyltoluene (0.29 ppb_v), 4-Ethyltoluene (0.14 ppb_v), 1,3,5-Trimethylbenzene (0.21 ppb_v), 2-Ethyltoluene (0.13 ppb_v), 1,2,4-Trimethylbezene (0.68 ppb_v), n-Decane (0.67 ppb_v), 1,4-Dichlorobenzene (1.6 ppb_v), 4-Isopropyltoluene (0.090 ppb_v), 1,2,3-Trimethylbenzene (0.22 ppb_v), 1,2-Dichlorobenzene (6.7 J ppb_v)
- AA-012-041112-001: Acetone (1.8 ppb_v), n-Hexane (0.15 ppb_v), Trichloroethene (0.15 J ppb_v), Toluene (0.18 ppb_v), n-Decane (0.40 ppb_v), 1,2-Dhichlorobenzene (0.19 ppb_v)
- AA-020-041112-001: no compounds above detection limits

Thursday, April 12, 2012:

- AA-000-041212-001: Acetone (2.2 ppb_v), Benzene (0.35 ppb_v)
- AA-011-041212-001: Acetone (10 ppb_v), 2-Butanone (0.67 J ppb_v), n-Hexane (6.0 ppb_v), Benzene (0.41 ppb_v), Trichloroethene (0.17 J ppb_v), Toluene (2.0 ppb_v), n-Octane (0.24 ppb_v), 3-Ethyltoluene (0.27 ppb_v), 1,2,4-Trimethlybezene (0.51 ppb_v), 1,2-Dichlorobenzene (0.29 ppb_v)
- AA-017-041212-001: Dichlorofluromethane (0.27 ppb_v), Acetone (3.3 ppb_v), cis-1,2-Dichloroethene (4.6 ppb_v), Benzene (0.22 ppb_v), Trichloroethene (0.54 ppb_v), Chlorobenzene (0.75 ppb_v), o-Xylene (0.40 ppb_v), Cumene (0.24 ppb_v), n-Propylbenzene (0.65 ppb_v), 3-Ethyltoluene (1.6 ppb_v), 4-Ethyltoluene (0.75 ppb_v), 1,3,5-Trimethylbenzene (0.84 ppb_v), 2-Ethlytoluene (0.64 ppb_v), 1,2,4-Trimethylbezene (3.0 ppb_v), 1,4-Dichlorobenzene (0.49 ppb_v), 1,2,3-Trimethylbenzene (0.80 ppb_v), 1,2-Dichlorobenzene (2.2 ppb_v)
- AA-021-041212-001: : Acetone (2.1 ppb_v)

Refer to Attachment C-2 tables for complete summary of results.

Attachment C-2:

- Table 10 Air Analytical Summary Table for 03/13/12 03/19/12
- Table 11 Air Analytical Summary Table for 03/22/12 03/28/12
- Table 12 Air Analytical Summary Table for 03/29/12 04/12/12

Attachment C-1:

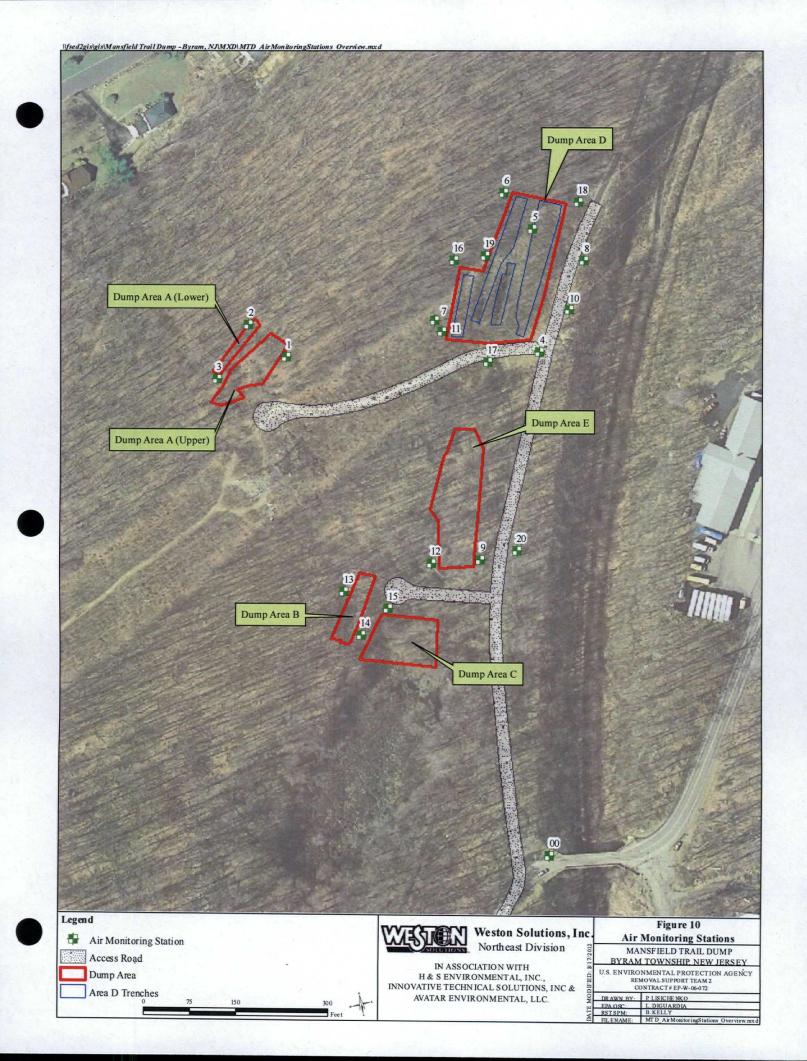
Figures

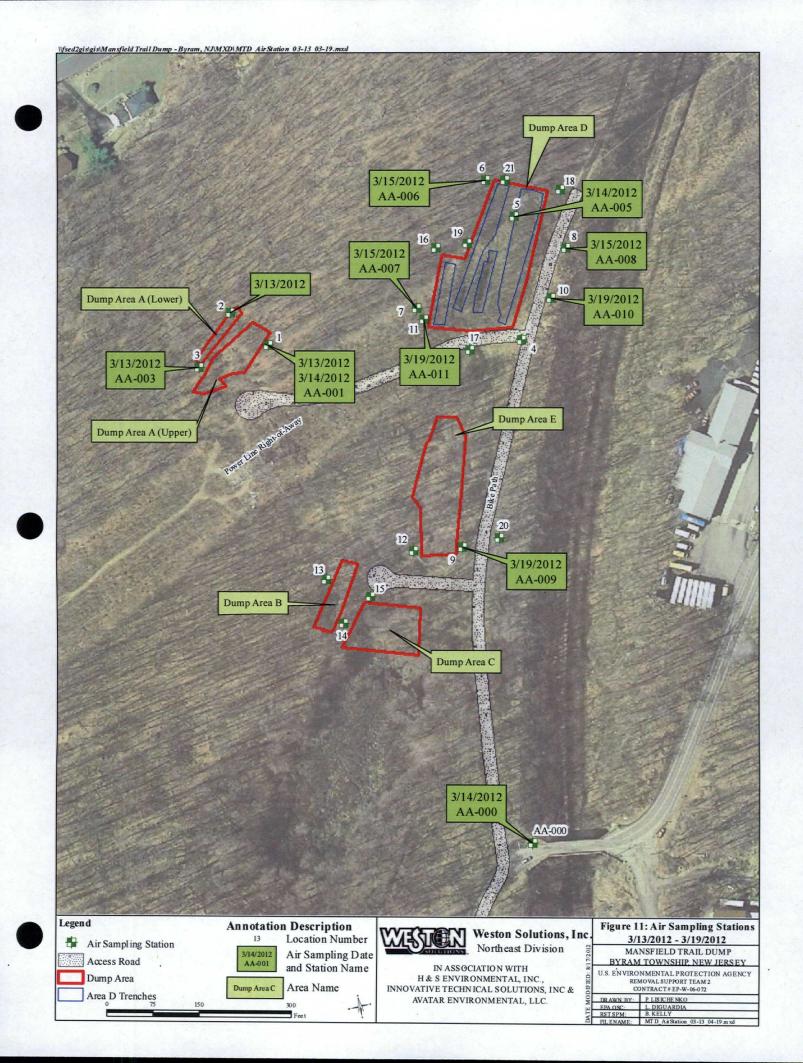
Figure 10 – Air Monitoring Stations

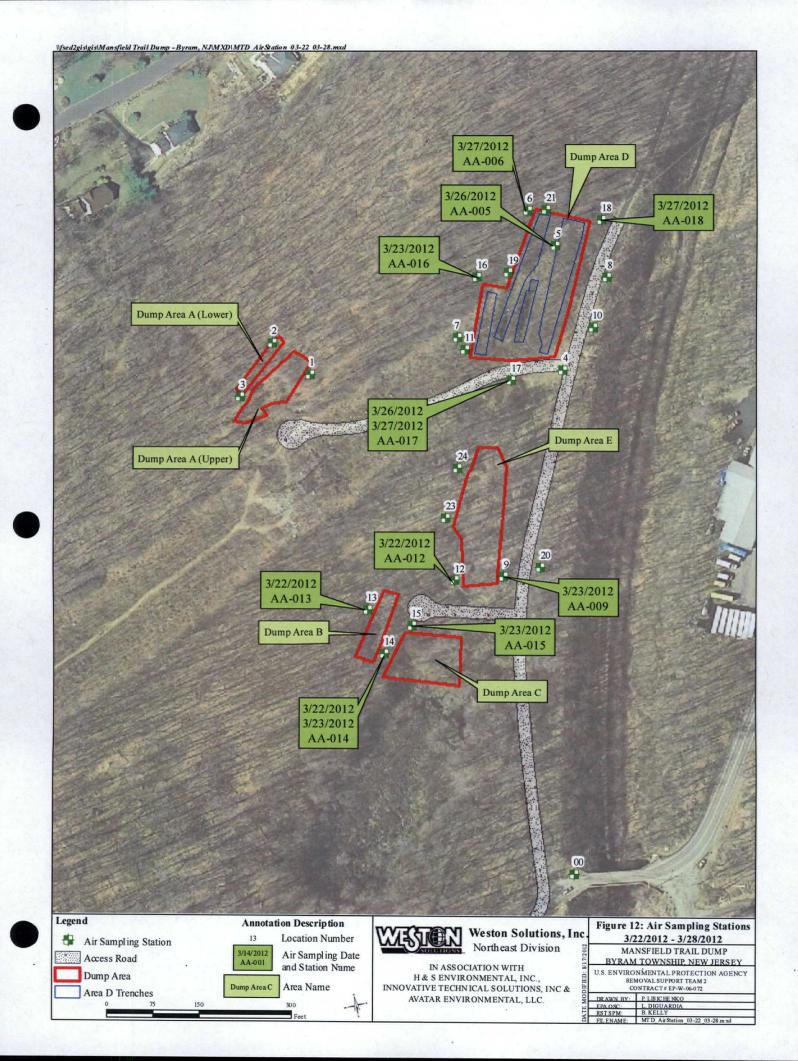
Figure 11 – Air Sampling for 03/13/12 – 03/19/12

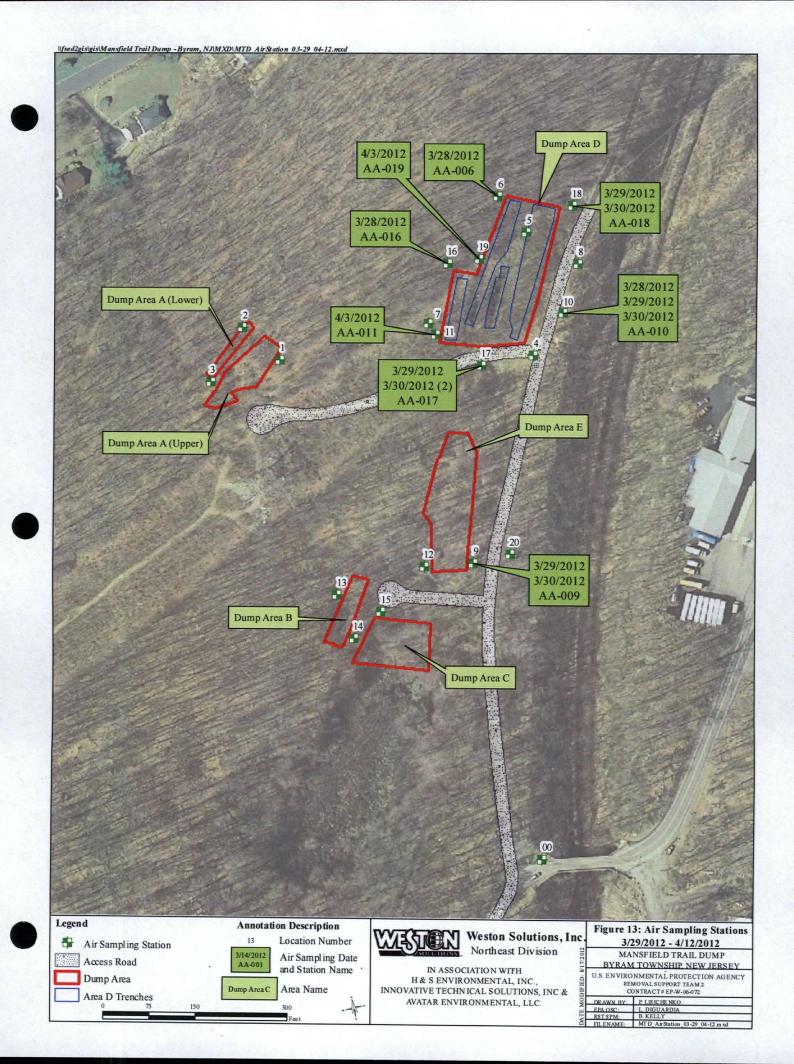
Figure 12 - Air Sampling for 03/22/12 - 03/28/12

Figure 13 – Air Sampling for 03/29/12 - 04/12/12









Attachment C-2

Table 8. – Air Sample Collection Information

Table 9. – Weather Condition Information for Air Sampling

Table 10. – Air Analytical Summary Table for 03/13/12 – 03/19/12

Table 11. – Air Analytical Summary Table for 03/22/12 – 03/28/12

Table 12. – Air Analytical Summary Table for 03/29/12 – 04/12/12

Table 8.
Air Sample Collection Information

	1.0								
4 4 4								Total	Avergae
100			Pump		Volume		į.	Time	Flow Rate
Sample #	Location	Sub Location	#	Sample Date	(L)	Start Time	Stop Time	(min)	(mL/min)
AA-000-031412-001	AA-000	Outside Site Trailer	1	3/14/2012	4	9:36:00 AM	10:16:00 AM	40	0.1085
AA-000-033012-001	AA-000	Outside Site Trailer	2	3/30/2012	3.9	8:04:00 AM	8:44:00 AM	40	0.0975
AA-001-031312-001	AA-001	Dump Area A Lower	2	3/13/2012	4.01	11:22:00 AM	11:42:00 AM	40	0.1003
AA-001-031312-002	AA-001	Dump Area A Lower	- 2	3/13/2012	4.03	2:11:00 PM	2:51:00 PM	40	0.1007
AA-001-031412-001	AA-001	Area A	2	3/14/2012	4.01	10:27:00 AM	11:05:00 AM	40	0.1003
AA-002-031312-001	AA-002	Dump Area A Lower	3	3/13/2012	4	11:15:00 AM	11:55:00 AM	40	0.0999
AA-002-031312-002	AA-002	Dump Area A Lower	3	3/13/2012	3.99	2:08:00 PM	2:48:00 PM	40	0.0997
AA-002-031412-001	AA-002	Area A	3	3/14/2012	4	10:31:00 AM	11:09:00 AM	40	0.0999
AA-003-031312-001	AA-003	Dump Area A Lower	2	3/13/2012	4.1	11:17:00 AM	11:57:00 AM	40	0.1025
AA-004-031412-001	AA-004	Area D	4	3/14/2012	4	2:15:00 PM	2:55:00 PM	40	0.15
AA-005-031412-001	AA-005	Area D	5	3/14/2012	4	2:06:00 PM	2:46:00 PM	40	0.076
AA-005-032612-001	AA-005	Dump Area D NE	1.	3/26/2012	4.29	10:10:00 AM	10:50:00 AM	40	0.1072
AA-006-031512-001	AA-006	Area D	· 1	3/15/2012	4.01	10:09:00 AM	10:49:00 AM	40	0.1072
AA-006-032712-001	AA-006	Dump Area D NW	2	3/27/2012	4.38	1:29:00 PM	2:09:00 PM	40	0.1094
AA-006-032812-001	AA-006	Area D NW	2	3/28/2012	3.81	10:10:00 AM	10:50:00 AM	40	0.0952
AA-007-031512-001	AA-007	Area D	1	3/15/2012	4.01	10:13:00 AM	10:53:00 AM	. 40	0.1072
AA-008-031512-001	AA-008	Area D	3	3/15/2012	4.01	10:07:00 AM	10:47:00 AM	40	0.1017
AA-009-031912-001	AA-009	Dump Area E	1	3/19/2012	4	2:20:00 PM	3:00:00 PM	40	0.1009
AA-009-032312-001	AA-009	Dump Area E	4	3/23/2012	3.97	12:10:00 PM	12:50:00 PM	40	0.0993
AA-009-032712-001	AA-009	Dump Area E	3	3/27/2012	4.35	9:40:00 AM	10:15:00 AM	35	0.1242
AA-009-032912-001	AA-009	Dump Area E	1	3/29/2012	4.07	9:57:00 AM	10:37:00 AM	40	0.1017
AA-009-033012-001	AA-009	Dump Area E	2	3/30/2012	3.9	11:54:00 AM	12:34:00 PM	40	0.0975
AA-010-03012-001	AA-010	Area D SE	3	3/30/2012	4.03	12:10:00 PM	12:50:00 PM	40	0.1008
AA-010-031912-001	AA-010	Dump Area D SE	4	3/19/2012	4.42	2:14:00 PM	2:50:00 PM	36	0.1229
AA-010-032812-001	AA-010	Area D SE	3	3/28/2012	4.11	10:16:00 AM	10:56:00 AM	40	0.1028
AA-010-032912-001	AA-010	Area D SE	3	3/29/2012	3.59	10:05:00 AM	10:40:00 AM	35	0.1026
AA-011-031912-001	AA-011	Dump Area D SW	3	3/19/2012	3.71	2:17:00 PM	2:57:00 PM	40	0.0928
AA-011-032612-001	AA-011	Dump Area D SW	5	3/26/2012	4.13	10:20:00 AM	11:00:00 AM	40	0.1033

Table 8.
Air Sample Collection Information

								60. 1	
		The second secon	Pump		Volume			Total Time	Avergae Flow Rate
Sample #	Location	Sub Location	#	Sample Date	(L)	Start Time	Stop Time	(min)	(mL/min)
AA-011-040312-001	AA-011	Dump Area D SW	4	4/3/2012	4,56	10:46:00 AM	11:30:00 AM	44	0.1037
AA-012-032212-001	AA-012	Dump Area B NW	2	3/22/2012	4,26	12:27:00 PM	1:07:00 PM	40	0.1066
AA-013-032212-001	AA-013	Dump Area B W	4	3/22/2012	4.22	12:31:00 PM	1:11:00 PM	40	0.1054
AA-014-032312-001	AA-014	Dump Area B SE	3	3/23/2012	3,78	12:15:00 PM	12:55:00 PM	40	0.0944
AA-015-032312-001	AA-015	Dump Area C NE	2	3/23/2012	4	12:06:00 PM	12:46:00 PM	40	0.1001
AA-016-032612-001	AA-016	Dump Area D W	. 6	3/26/2012	4.04	10:25:00 AM	11:05:00 AM	40	0.1009
AA-016-032812-001	AA-016	Area D DW	4	3/28/2012	4.3	10:22:00 AM	11:02:00 AM	40	0.1076
AA-017-032612-001	AA-017	Dump Area D S	2	3/26/2012	3.98	10:15:00 AM	10:55:00 AM	40	0.0995
AA-017-032712-001	AA-017	Dump Area D S	, 3	3/27/2012	4,52	1:25:00 PM	2:05:00 PM	40	0.113
AA-017-032912-001	AA-017	Dump Area D S	4	3/29/2012	3.96	10:02:00 AM	10:42:00 AM	40	0.099
AA-017-040312-001	AA-017	Dump Area D S	3	4/3/2012	4.16	10:40:00 AM	11:20:00 AM	40	0.1039
AA-017-040312-002	AA-017	Dump Area D S	- 3	4/3/2012	4.25	2:00:00 PM	2:40:00 PM	40	0.1062
AA-018-032712-001	AA-018	Dump Area D NE	- 4	3/27/2012	3.96	1:35:00 PM	2:15:00 PM	40	0.0991
AA-018-032912-001	AA-018	Dump Area D NE	4	3/29/2012	3.52	10:08:00 AM	10:42:00 AM	34	0.1034
AA-018-033012-001	AA-018	Dump Area D NE	4	3/30/2012	4	12:05:00 PM	12:45:00 PM	40	0.1
AA-018-040312-001	AA-018	Dump Area D NE	2	4/3/2012	3.77	1:50:00 PM	2:35:00 PM	45	0.0837
AA-019-040312-001	AA-019	Area D NW	4	4/3/2012	4.2	2:08:00 PM	2:48:00 PM	40	0.1049
AA-000-041212-001	AA-000	Outside Site Trailer	3	4/12/2012	4.26	2:00:00 PM	2:35:00 PM	35	0.1218
AA-010-041012-001	AA-010	Area D SE	2	4/10/2012	3.99	12:18:00 PM	12:58:00 PM	40	0.0998
AA-010-041012-002	AA-010	Dump Area D SE	2	4/10/2012	3.99	1:00:00 PM	1:40:00 PM	40	0.0998
AA-010-041112-001	AA-010	Area D SE	2	4/11/2012	3.96	8:15:00 AM	8:55:00 AM	40	0.0989
AA-011-041112-001	AA-011	Dump Area D SW	3	4/11/2012	4.22	8:20:00 AM	9:05:00 AM	45	0.0937
AA-011-041212-001	AA-011	Outside Site Trailer	2	4/12/2012	2.44	10:30:00 AM	11:10:00 AM	40	0.0611
AA-012-041112-001	AA-012	Dump Area e SW	3	4/11/2012	4.15	10:05:00 AM	10:45:00 AM	40	0.1038
AA-017-041012-001	AA-017	Dump Area D S	4	4/10/2012	4.32	12:20:00 PM	1:00:00 PM	40	0.1079
AA-017-041012-002	AA-017	Dump Area D S	4	4/10/2012	4.32	1:00:00 PM	1:40:00 PM	40	0.1079
AA-017-041212-001	AA-017	Outside Site Trailer	5	4/12/2012	2.96	10:33:00 AM	11:13:00 AM	40	0.0741
AA-018-041012-001	AA-018	Dump Area D NE	3	4/10/2012	4.36	12:15:00 PM	12:55:00 PM	40	0.109

Table 8.
Air Sample Collection Information

	1111		4.1				Company of the second	, E	1 730
			Pump		Volume		e elle	Total Time	Avergae Flow Rate
Sample #	Location	Sub Location	#	Sample Date		Start Time	Stop Time	(min)	(mL/min)
AA-020-041112-001	AA-020	Dump Area E E	2	4/11/2012	4.08	10:00:00 AM	10:40:00 AM	40	0.102
AA-021-041212-001	AA-021	Area D N	3	4/12/2012	3.71	10:37:00 AM	11:17:00 AM	40	0.0928
FB-031312-001	AA-000	Outside Site Trailer	NA	3/13/2012	NA	7:30:00 AM	NA	NA	NA
FB-031512-001	AA-000	Outside Site Trailer	NA	3/15/2012	NA	7:30:00 AM	NA	NA '	NA
FB-031912-001	AA-000	Outside Site Trailer	NA	3/19/2012	NA .	3:15:00 PM	NA	NA	NA
FB-032212-001	AA-000	Outside Site Trailer	NA	3/22/2012	NA	7:30:00 AM	NA	NA	NA
FB-032312-001	AA-000	Outside Site Trailer	NA	3/23/2012	NA	7:30:00 AM	NA	NA	NA
FB-032612-001	AA-000	Outside Site Trailer	NA	3/26/2012	NA	7:30:00 AM	NA	NA	NA
FB-032712-001	AA-000	Outside Site Trailer	NA	3/27/2012	NA	7:30:00 AM	ΝA	NA	NA
FB-032812-001	AA-000	Outside Site Trailer	NA	3/28/2012	NA	7:30:00 AM	NA	NA	NA
FB-032912-001	AA-000	Outside Site Trailer	NA	3/29/2012	NA	9:30:00 AM	NA	NA	NA
FB-033012-001	AA-000	Outside Site Trailer	NA	3/30/2012	NA	8:30:00 AM	NA	NA	NA
FB-040312-001	AA-000	Outside Site Trailer	NA	4/3/2012	NA	8:30:00 AM	NA	NA	NA
FB-041012-001	AA-000	Outside Site Trailer	NA	4/10/2012	NA	10:00:00 AM	NA	NA	NA
FB-041112-001	AA-000	Outside Site Trailer	NA.	4/11/2012	NA	8:00:00 AM	NA	NA	NA
FB-041212-001	AA-000	Outside Site Trailer	NA	4/12/2012	NA	8:00:00 AM	NA	· NA	NA

Notes: L - Liter; min - minute; mL/min - milliliter per minute; wind direction (N - north, E - east, S - south, W - west); NA - not applicable; FB - field blank

Table 9.

Air Sampling Weather Condition Information

		-					
Date	Time	Temperature (F)	Humidity (%)	To Wind Direction	Wind Speed (mph)	Sky Conditions	Samples Collected
-	0800 hrs	53.8	83%	SW	0.7		
3/13/2012	1200 hrs	70.9	48%	N	0.7	Clear/Sunny	Yes
•	1500 hrs	70.9	48%	NE	1.3		
	0800 hrs	49.6	49.60%	NW	0.2		
3/14/2012	1200 hrs	65.5	65.50%	SE	1.6	Clear/Sunny	Yes
	1500 hrs	68.7	68.70%	Ë	1.8		
	0800 hrs	42.8	86%	Е	1.3		
3/15/2012	1200 hrs	46	72%	Е	2.9	Clear/Sunny	Yes
	1500 hrs	52.5	60%	E	3.6		•
	0800 hrs	46.2	86%	S	1.2		
3/16/2012	1200 hrs	44.8	93%	NE	0.2	Cloudy/Fog	No
	1500 hrs	- 52	73%	E	1.2	,	
	0800 hrs	55	96%	N.A.	. 0		
3/19/2012	1200 hrs	68	65%	NE	6	Clear /Sunny	Yes
	1500 hrs	. 72	49%	NE	7	i	
	0800 hrs	55	89%	N	1		
3/20/2012	1200 hrs	70	59%	N	5	Clear/Sunny	No
	1500 hrs	77	47%	N	5		
	0800 hrs	57.9	93%	NW	0.7	. "	No
3/21/2012	1200 hrs	60.3	88%	NWW	1.8	Clear/Sunny	
	1500 hrs	62.8	79%	NW	1.6		
	0800 hrs	53.8	83%	SW	0.7		Yes
3/22/2012	1200 hrs	70.9	48%	N	0.7	Clear/Sunny	
	1500 hrs	70.9	48%	NE	1.3		
	0800 hrs	49.6	49.60%	, NW	0.2		
3/23/2012	1200 hrs	65.5	65.50%	SE	1.6	Clear/Sunny	Yes
	1500 hrs	68.7	68.70%	Е	1.8		
	0800 hrs	42.8	86%	Е	1.3	7	
3/26/2012	1200 hrs	46	72%	Е	2.9	Clear/Sunny	Yes
	1500 hrs	52.5	60%	Е	3.6	,	
	0800 hrs	46.2	86%	S	1.2		
3/27/2012	1200 hrs	44.8	93%	NE	0.2	Clear/Sunny	Yes
	1500 hrs	52	73%	Е	1.2		
	0800 hrs	41	80%	. SE	1.8		
3/29/2012	1200 hrs	48.2	65%	E	2	Clear/Sunny	Yes
	1500 hrs	56.7	50%	SE	2.3		
	0800 hrs	46.2	75%	E	0.4		···
3/30/2012	1200 hrs	55	40%	SE	1.1	Scattered	Yes
. 1	1500 hrs	48.1	38%	Е	1.5	Clouds	Yes
	0800 hrs	38	73%	NW	1		
4/3/2012	1200 hrs	51.1	19%	SSE	1.6	Clear/Sunny	Yes
ŀ	1500 hrs	63.5	12%	ESE	1.8	- Clour Dumiy	

Table 9.
Air Sampling Weather Condition Information

Date	Time	Temperature (F)	Humidity (%)	To Wind Direction	Wind Speed (mph)	Sky Conditions	Samples Collected
	0800 hrs	43.3	54%	W	0.4	\	Yes
4/10/2012	1200 hrs	65.3	50%	W`	0	Clear/Sunny	
	1500 hrs	53.1	52%	W	1	1	
	0800 hrs	41.5	55%	NW	1.1		Yes
4/11/2012	1200 hrs	50.5	34%	W	1.6	Clear/Sunny	
	1500 hrs	. 50	42%	W	1.8	· i	;
	0800 hrs	43.5	63%	. NW	1.1		
4/12/2012	1200 hrs	55.8	40%	NW	1.9	Clear/Sunny	Yes
	1500 hrs	53.1	42%	NW	1.1		

Notes: hrs - hours; F - degrees Fahrenheit; wind direction (N - north, E - east, S - south, W - west); mph - miles per hour, % - percent

Data for the above weather conditions were collected by United States Coast Guard onsite utilizing an onsite mobile weather station. The humidity measurements highlighted in bold are above 80% humidity. Air samples were not collected above this parameter. Samples collected on days during high humidity were collected once humidity dropped below 80%.

			•			*	
	•						
	•						
CHEMI CAL_NA ME Aluminu	RESUL T_VAL UE	METHOD_D ETECTION_L IMIT	REPORTING_ DETECTION_L IMIT	QUANTIT ATION_LI MIT	RESU LT_U NIT	DETECTIO N_LIMIT_U NIT	TIC_RETE NTION_TI ME
m Antimon	200	5.1	200	200	ug/L	ug/L	
ý	60.0	1.6	60.0	60.0	ug/L	ug/L	
Arsenic	10.0	0.66	10.0	10.0	ug/L	ug/L	**
Barium Berylliu	200	0.24	200	200	ug/L	ug/L	
m Cadmiu	5.0	0.036	5.0	5.0	ug/L	ug/L	
m -	5.0	0.35	5.0	5.0	ug/L	ug/L	
Calcium Chromiu	67.0	33.0	5000	5000	ug/L	ug/L	
m .	10.0	1.3	10.0	10.0	ug/L	ug/L	
Cobalt	50.0	0.13	50.0	50.0	ug/L	ug/L	
Copper	25.0	0.83	25.0	25.0	ug/L	ug/L	
Iron	2.9	2.0	100	100	ug/L	ug/L	
Lead Magnesi	10.0		-10.0	10.0	ug/L	ug/L	
um Mangan	6.8	4.3	5000	5000	ug/L	ug/L	
ese	15.0	0.14	15.0	15.0	úg/L	ug/L	
Mercury	0.17	0.016	0.20	0.20	ug/L	ug/L /	
Nickel Potassiu	40.0	0.91	40.0	40.0	ug/L	ug/L	
m Seleniu	5000	17.0	5000	5000	ug/L	ug/L	
m	35.0	0.82	35.0	35.0	ug/L	ug/L	
Silver	10.0	1.4	10.0	10.0	ug/Ľ	ug/L	•
Sodium	150	12.0	5000	5000	ug/L	ug/L	
Thallium Vanadiu	25.0	1.0	25.0	25.0	ug/L	ug/L	· .
m	50.0	1.2	50.0	50.0	ug/L	ug/L	•
Zinc	8.4	0.19	60.0	60.0	ug/L	ug/L	`\
							,

Table 9.
Air Sampling Weather Condition Information

Date	Time	Temperature (F)	Humidity (%)	To Wind Direction	Wind Speed (mph)	Sky Conditions	Samples Collected
	0800 hrs	53.8	83%	sw	0.7		
3/13/2012	1200 hrs	70.9	48%	N	0.7	Clear/Sunny	Yes
	1500 hrs	70.9	48%	NE	1.3		
	0800 hrs	49.6	49.60%	NW	0.2		
3/14/2012	1200 hrs	65.5	65.50%	SE	1.6	Clear/Sunny	Yes
	1500 hrs	68.7	68.70%	Е	1.8		
	0800 hrs	42.8	86%	E	1.3	ŧ	
3/15/2012	1200 hrs	46	72%	Е	2.9	Clear/Sunny	Yes
,	1500 hrs	52.5	60%	Е	3.6		
	0800 hrs	46.2	86%	S	1.2		
3/16/2012	1200 hrs	44.8	93%	NE	0.2	Cloudy/Fog	No
	1500 hrs	52	73%	Е	1.2		
	0800 hrs	. 55	96%	N.A.	0		
3/19/2012	1200 hrs	68	65%	NE	6	Clear /Sunny	Yes
	1500 hrs	72	49%	NE	7		
	0800 hrs	55	89%	N	, 1 .	<u> </u>	
3/20/2012	1200 hrs	70	59%	N	5	Clear/Sunny	No
	1500 hrs	77	47%	N	5		
, , , , , , , , , , , , , , , , , , , ,	0800 hrs	57.9	93%	NW	0.7)
3/21/2012	1200 hrs	60.3	88%	NWW	1.8	Clear/Sunny	No
·	1500 hrs	62.8	79%	NW	1.6		
	0800 hrs	53.8	83%	SW	0.7		
3/22/2012	1200 hrs	70.9	48%	N	0.7	Clear/Sunny	Yes
	1500 hrs	70.9	48%	NE	1.3	Clear/Sumy	
,	0800 hrs	49.6	49.60%	NW	0.2		
3/23/2012	1200 hrs	65.5	65.50%	SE	1.6	Clear/Sunny	Yes
	1500 hrs	68.7	68.70%	Е	1.8		
	0800 hrs	42.8	86%	Е	1.3		
3/26/2012	1200 hrs	46	72%	E	2.9	Clear/Sunny	Yes
	1500 hrs	52.5	60%	Е	3.6	-	
	0800 hrs	46.2	86%	S	1.2		
3/27/2012	1200 hrs	44.8	93%	NE	0.2	Clear/Sunny	Yes
	1500 hrs	52	73%	· E	1.2		
V	0800 hrs	41	80%	SE	1.8		
3/29/2012	1200 hrs	48.2	65%	Е	2	Clear/Sunny	Yes
	1500 hrs	56.7	50%	SE	2.3		
	0800 hrs	46.2	75%	Е	0.4		
3/30/2012	1200 hrs	55	40%	SE	1.1	Scattered	Yes
:	1500 hrs	48.1	38%	Е	1.5	Clouds	l res
	0800 hrs	38	73%	NW	1		
4/3/2012	1200 hrs	51.1	19%	SSE	1.6	Clear/Sunny	Yes
	1500 hrs	63.5	12%	ESE	1.8		

Table 9.

Air Sampling Weather Condition Information

Date -	Time	Temperature (F)	Humidity :	To Wind Direction	Wind Speed (mph)	Sky Conditions	Samples Collected
	0800 hrs	43.3	54%	W	0.4		1
4/10/2012	1200 hrs	65.3	50%	W	0	Clear/Sunny	Yes
	1500 hrs	53.1	52%	W	1	<u> </u>	
-	0800 hrs	41.5	55%	NW	1.1		Yes
4/11/2012	1200 hrs	50.5	34%	W	1.6	Clear/Sunny	
	1500 hrs	50	42%	W	1.8		
· • 9/ ·	0800 hrs	43.5	63%	NW	1.1		
4/12/2012	1200 hrs	55.8	40%	NW	1.9	Clear/Sunny	Yes
	1500 hrs	53.1	42%	NW	1.1]	

Notes: hrs - hours; F - degrees Fahrenheit; wind direction (N - north, E - east, S - south, W - west); mph - miles per hour, % - percent

Data for the above weather conditions were collected by United States Coast Guard onsite utilizing an onsite mobile weather station. The humidity measurements highlighted in bold are above 80% humidity. Air samples were not collected above this parameter. Samples collected on days during high humidity were collected once humidity dropped below 80%.

								I ÄA 002 021212 001			
Sample ID:		AA-	001-03131 3/13/2012		AA-	001-03131 3/13/2012		AA-002-031312-001 3/13/2012			
Sample Volume (liters)	23	,	4.01 Liter		-	4.03 Liter		4.00 Liter			
Mater			Air			Air	·	ļ	Air		
Volatiles	ug/Tube	ng/Tube		PPB(v/v)	no/Date		PPB(v/v)	no/Tabe		PPB(V/V)	
Dichlorodifluoromethane (CFC 12)	2.0	7.4	1.8	0.37	7.6	1.9	0.38	U	U	U	
1,2-Dichloro-1,1,2,2-								,			
tetrafluoroethane (CFC 114)	2.0	U	U		U	Ü	U	Ü	U.	U	
Vinyl Chloride	2.0	Ü	Ŭ.	U_	Ü	U	U	Ü	Ü	Ü	
1,3-Butadiene	2.0	U	U	U	Ü	Û	Ü	Ú	U	U	
Chloroethane	2.0	U	U	U	Ŭ	Ü	Ü	Ű	υ	Ü	
Acetone Trichlorofluoromethane	10 2.0	3.2	U 0.80	0.14	U	0.82	0.15	Ü	Ü	Ü	
1.1-Dichloroethene	2.0	U	U.SU	U U	U	U.62	U.13	<u>י</u>	Ű	Ü	
Methylene Chloride	5.0	U	U	Ü	U	Ü	U	Ü	Ú	บ้	
Trichlorotrifluoroethane	2.0	U	υ	U	Ü	Ü	Ü	Ú	Ü	Ú	
trans-1,2-Dichloroethene	2.0	Ū	ับ	Ü	U	υ	U	U	Ü	Ü	
1,1-Dichloroethane	5.0	UJ	UJ	UJ	ŢŪ.	UJ	ບັນ	IJ	ຸເນ	Ü	
2-Butanone (MEK)	2.0	U	U	บ	บ	U	Ü	Ü	Ü	U	
cis-1,2-Dichloroethene	2.0	2.1	0.53	0.13	Ü	Ŭ	U	U	U	Ü	
n-Hexane	2.0	Ü	U	บ	U	U	U	Ü	บ	U	
Chiloroform	2.0	U	U	U .	U	บ	U	Ü	U	U	
1,2-Dichloroethane	2.0	U .	U	U	U	U	, U .	Ü	U	U	
1,1,1-Trichloroethane Benzene	2.0	Ü	U	U	U	Ü	U	ט יי	U	U	
Carbon Tetrachloride	2.0	U	U U	V U	U	Ü	U	U	U	U	
1,2-Dichloropropane	2.0	Ū	Ū	Ü	U	Ü	Ŭ	U	U	บ	
Bromodichloromethane	2.0	Ü	Ü	Ü	υ	υ	บ	<u>ט</u>	U	บ	
Trichloroethene	2.0	3.2	0.81	0.15	Ü	U	Ü	U	บ	U	
1,4-Dioxane	2.0	บ	Ü	Ü	Ü	Ū	U	νÜ	Ū	บ	
2,2,4-Trimethylpentane	2.0	U	Ü	Ü	Ú	บ	υ	U	Ū	U	
n-Heptane	2.0	U	Ü	Ù	Ü	Ű	Ü	Ū	บ	Ü	
4-Methyl-2-pentanone	2.0	U	U	Ü	Ü	U	Ü	U	Ü	Ü	
1,1,2-Trichloroethane	2.0	U	U	. U	Ü	U	Ü	U	Ű	U.	
Toluene	2.0	U	U '	U	U	Ü	Ü	U	Ü	U	
2-Hexanone	2.0	U	U	U	U	Ü	Ű.	_ U	Ü	U	
Dibromochloromethane 1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	Ü	U	
n-Octane	2.0	U	U	U	บ	บ	Ü	U	U	,Ü,	
Tetrachloroethene	2.0	U	บ	U	บ	Ü	ט	U U	Ü	บ	
Chlorobenzene	2.0	Ū	U	Ü	U	U	U	U	ש	บ	
Ethylbenzene	2.0	U	U	U	Ü	Ü	υ	U	ט	Ü	
m,p-Xylenes	4.0	Ü	U	Ū	บ	Ü	ับ	Ü	U	Ū	
Bromoform	2.0	U	U	U	U	Ū	U	Ū	U	Ū	
Styrene	2.0	Ü	U	Ü	Ū	U	U	U	U	Ü	
o-Xylene	2.0	Ū	U	U	ប	U	Ŭ	U	U	Ū	
n-Nonane	2,0	Ū	U	U	U /	Ü	U	Ū	υ	U	
1,1,2,2-Tetrachloroethane	2.0	Ü	Ü	U	Ü	Ü	Ù	U	υ	บ	
Cumene n-Propylbenzene	2.0	Ü	Ü	U	Ü	Ü	U	U.	U	บ	
3-Ethyltoluene	2.0	U.	U U	Ŭ Ŭ	Û Û	U	U	Ü	Ü	U	
4-Ethyltoluene	2.0	Ü	U	U.	υ	Ū,	Ü	Ü	U	Ü,	
1,3,5-Trimethylbenzene	2.0	Ü	U	บ	υ	U .	U	Ü	ΰ	Ü	
2-Ethyltohiene	2.0	Ü	U	บ	-U	บ	U	Û	Ü	Ü	
1,2,4-Trimethylbenzene	2.0	Ù	U	U	υ	Ū	U	Û	Û	Ü	
n-Decane	2.0	Ü	U	U	U	U	U	U	Ü	Ü	
1,3-Dichlorobenzene	2.0	Ŭ	U	U	Ü	U	U	U	U	Ü	
1,4-Dichlorobenzene	2.0	U.	U	U	U	U	U	Ü	U	Û	
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	υ	U.	U	U	Ù	
1,2,3-Trimethylbenzene	2.0	Ü	U	U	U	U	บ	Ü	U	Û	
1,2-Dichlorobenzene	2.0	Ü	U	U	ับ	U	U	Û	บ	Ù	
1,2,4-Trichlorobenzene Naphthalene	2.0	U	U	U	U	U.	U	Ü	U	U	
Naphthalene Hexachlorobutadiene	2.0	Ų	U	U	Ü	Ü	U	U	U	Ü	
1 CARCHOZOOMBUICHE	2.0	U	U	U	Ũ	Ŭ	υ	U	U	Ū	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant). ng/L to ug/m3: ng/tube/sample volume in liter-ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.
U - Not Detected

J - estimated value Dilution Factor: 1

		446	002-03131	2 002	2.001	FB-031312-001					
Sample III.			3/13/2012		AAA	3/13/2012		3/13/2012			
Sample Volume (liters)	-		3.99 Liter		·	4.1 Liter		NA NA			
Marrie:			Air			Air			Air		
Volatiles	ne/Tube	ng/Tabe		PPB(v/c)	no/Tuba		PPB(v/v)	and Protect	ne/m²	PPB(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	2.0	0.51	0.10	2.7	0.67	0.14	Ű	U	U	
1.2-Dichloro-1,1.2.2-	.2,0	2.0	- V.J.I	0.20		,	V.1.4	<u> </u>	,		
tetrafluoroethane (CFC 114)	2.0	U	บ	ับ	U	U	U	U	Ü	υ	
Vinyl Chloride	2.0	U	U	U	Ü	Ü	U	Ü	U	U	
1,3-Butadiene	2.0	U	U	U	U	U	Ü	U	υ	Ú	
Chloroethane	2.0	Ū	Ü	U	U	Ù	U	U	U	Ü	
Acetone	10	U	U	U	U	U	U	Ü	U	Ú	
Trichlorofluoromethane	2.0	U	U	U	Ü	U	υ	Ú	Ü	Ŭ	
1,1-Dichloroethene	2.0	UJ	UJ	ÜJ	ÚJ	ÚJ	UJ	ÜĴ	UĴ	ÜJ	
Methylene Chloride	5.0	Ū	Ü	Ú	U	υ	Ū	ับ	Ü	Ü	
Trichlorotrifluoroethane	2.0	Ü	Ü	U	Ü	Ü	Ŭ U	U.	Ü	Û.	
trans-1,2-Dichloroethene 1,1-Dichloroethane	2.0	Ü	Ü	Ü	Ü	Ŭ	Ü	Ü	Ū	ΰ	
2-Butanone (MEK)	5.0 2.0	Ü	Ū	Ü	U	Ü	Ū.	ט	Ü	Ū	
cis-1.2-Dichloroethene	2.0	ΰ	ΰ	Ũ	2.6	0.64	0.16	Ü	Ü	U	
n-Hexane	2.0	Ü	Ü	Ü	U	U	U	Ü	Ü	Û	
Chloroform	2.0	บ	υ	บ	Ū	บ	U	U	Ü	Ü	
1,2-Dichloroethane	2.0	·U	U	บ	U	Ü	U	Ü	Ü	Ū	
1,1,1-Trichloroethane	2.0	บ	· U	Ü	U	Ü	U	Ü	Ü	Ü	
Benzene	2.0	U	U	Ü	υ	U	บ	U	U	U	
Carbon Tetrachloride	2.0	U	U	U	U	U	U	· U	Ü	U	
1,2-Dichloropropane	2.0	U	U	U	U	ט	U,	U	U	. บ	
Bromodichloromethane	2.0	Ŭ	U	U	U	U	U	U	Ŭ	Ü	
Trichloroethene	2.0	U	U	U,	2.3	0.56	0.10	Ų	Ŭ	U	
1,4-Dioxane	2.0	U	U	U	U	บ	U	Ü	, n	Ų	
2,2,4-Trimethylpentane	2.0	Ü	Ų	·U	U	U	U	U	U	U	
n-Heptane	2.0	Ü	U	U	U	U	U	Ū	U	U	
4-Methyl-2-pentanone 1,1,2-Trichloroethane	2.0	Ü	U	บ	U	U	U	U U	U	U	
Tolnene	2.0	Ü	Ü	Ü	Ú	U	U U	ΰ	Ü	U	
2-Hexanone	2.0	Ü	U	Ü	Ü	ϋ	Û	U	Ū	U	
Dibromochloromethane	2.0	Ü	U	Ú	Ü	Ü	Ü	Ū	U	U	
1,2-Dibromoethane	2.0	Ü	U	U	Ü	Ü	บ	Ü	Ū	Ū	
n-Octane	2.0	Ü	Ü	Ű	U	Ü	Ü	Ü	Ü	. U	
Tetrachloroethene	2.0	U	U	U	U	Ü	U	Ü	Ū	Ü	
Chlorobenzene	2.0	Ü	U	·U	U	Ŭ	Ü	U	U	U	
Ethylbenzene	2.0	Ü	U	Ū	Ŭ	U	U	Ü	ับ	U.	
m,p-Xylenes	4.0	U	U	U	U	บ	U	U	Ü	, U	
Bromoform	2.0	U	U	U	U	U	U	U	U	U	
Styrene	2.0	Ų	. บ	U	Ŭ,	U	U	U	Ŭ	U	
o-Xylene	2.0	U	U	υ	U.	··U	U	U	υ	U	
n-Nonane	2.0	Ü	U ·	. U	U	U	U	U	υ	U	
1,1,2,2-Tetrachioroethane Cumene	2.0	Ü	U	U	U	U	U	U	U	Ų	
n-Propylbenzene	2.0	Ü	Ü	U	U	U	U	U	U	U	
3-Ethyltohiene	2.0	Ü	U	Ü	U	U	· U	U .	ับ บ	U	
4-Ethyltoluene	2.0	บ็	Ú	Ü	. U	ΰ	Ü	Ú	Ü	Ü	
1,3,5-Trimethylbenzene	2.0	U	Ū	Ü	Ü	Ü	Ü	Ü	n y	Ù	
2-Ethyltoluene	2.0	U	Ü	Ü	Ű.	U	Ü	Ù	U	ΰ	
1,2,4-Trimethylbenzene	2.0	U	U	U	U	Ü	Ü.	Ü	U	U	
n-Decane	2.0	υ	U	U	U	U	Ü	Ü	ີບ	U	
1,3-Dichlorobenzene	2.0	U	U	Ü	υ	Ü	Ü	Ú	Ū.	U	
1,4-Dichlorobenzene	2.0	Ŭ	U	Ü	U.	U	U	_ U	Ü	Ü	
4-Isopropyltoluene (p-Cymene)	2.0	U	· U	Ü	Ų	U	Ü	Ü	Ũ	Ü	
1,2,3-Trimethylbenzene	2.0	U	U	U	. บ	U	Ũ.	Ü	Û	Ü	
1,2-Dichlorobenzene	2.0	Ü	U	Ŭ	U.	,Ū	Ü	Ü	Ũ	U	
1,2,4-Trichlorobenzene	2.0	Ü	U	Ŭ	U	Ü	Ü	U	U	U	
Naphthalene	2.0	U	Ú	Ű	U	Ü	Ù	U	U	U	
Hexachlorobutadiene	2.0	Ü	U	υ	Ü	Ü	U	Ü	U	Ü,	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Sample ID:		AA-000-031412-001 AA-001-031412-001							AA-002-031412-001				
Date:		7.7.	3/14/2012		201-1	3/14/2012		3/14/2012					
Sample Volume (liters)	4-14		4.0 Liter			4.01 Liter		 	4.0 Liter				
Matrix:			Air			Air			Air				
Volatiles	na/Tube	ng/Tube	ng/m	PPB(v/v)	up/Tube	ug/m²	PPB(va)	mp/Tube	ug/m²	PPB(viv)			
Dichlorodifluoromethane (CFC 12)	2.0	6.0	1.5	0.30	U	Ü	Ü	Ú	Ű	Ù			
1,2-Dichloro-1,1,2,2-													
tetrafluoroethane (CFC 114)	2.0	U	U_	U	Ü	U	U	U	Ü	U.			
Vinyl Chloride	2.0	U	U	U	Ü	U	U	U U	U	U			
1,3-Butadiene Chloroethane	2.0	U	บ	U	U	U	U	U,	U	U			
Acetone	2.0 10	บ	U	· U	U 12	U 3.1	U 1.3	U	U U	U			
Trichlorofluoromethane	2.0	2.6	0.64	0.11	Ü	U	U	U	U	บ			
1,1-Dichloroethene	2.0	U	U	U	U	Ü	U	Ü	ับ	Ü			
Methylene Chloride	5.0	U	U	U	Ü	Ü	Ü	Ū	U	Ü			
Trichlorotrifluoroethane	2.0	U	U	Ü	U	Ú	U	Ū	Ü	U			
trans-1,2-Dichloroethene	2.0	U	U	U	Ü	U	U	U	U	U			
1,1-Dichloroethane	5.0	ŪJ	ÚJ	ÜĴ	υĴ	ÚĴ	UJ	UJ	UJ	UJ			
2-Butanone (MEK)	2.0	U	Ü	Ü	Ù	Ù	Ü	U	Ü	U			
cis-1,2-Dichloroethene	2.0	. Ü.	U	Ü,	U	Ü	Ü	Ú	U	U			
n-Hexane	2.0	U	Ü	Û	Ü	Ü	U	Ü	U	U			
Chloroform	2.0.	U	U	Ü	Ü	Û_	U	U	Ü	, Ü			
1,2-Dichloroethane	2.0	U	U	Ŭ	U	Ü	U	Ü	Ŭ	U			
1,1,1-1richloroethane Benzene	2.0	U	Ü	U	·U	Ü	U.	Ŭ.	Ű	Ü			
Carbon Tetrachloride	2.0	U	U	ש	U .	U	Ū	Ü	Ü	U			
1,2-Dichloropropane	2.0	U	U	U	ט	Ŭ.	U	ַ	Ü	TU T			
Bromodichloromethane	2.0	Ū	U	u	U	บ	U	U	Ü	U			
Trichloroethene	2.0	Ū	U	n.	Ū	U	Ü	บ	U	Ü			
1,4-Dioxane	2.0	Ū	U	Ü	Ü	U	Ü	Ü	U	U			
2,2,4-Trimethylpentane	2.0	Ü	U	Ū	U	บ	U	U	U	Ū			
n-Heptane	2.0	U	U	U	U	U	U	Ü	U	U			
4-Methyl-2-pentanone	2.0	U	U	U	U	.Ū	U	ט	U	Ŭ,			
1,1,2-Trichloroethane	2.0	U	U	U	Ù	Ü	U	υ	U	U			
Toluene	2.0	Ū	U	Ŭ	U	U	Ü	U	ŭ	U			
2-Hexanone	2.0	Ū	Ü	U	U	U	U	U	U	U			
Dibromochloromethane 1,2-Dibromoethane	2.0	บั	U	U	Ü	U	U	U	U	U			
n-Octane	2.0	บ	Ũ	Ü	Û	Ü	Ŭ	U	U ·	U			
Tetrachloroethene	2.0	U	Ü	Ü	Ü	Ů	Ü	U	U	U			
Chlorobenzene	2.0	U	บ	U	Ü	Û	U	Ū	ΰ	U			
Ethylbenzene	2.0	U	Ū	U	Ü	Û	Ü	- 0	U	U			
m,p-Xylenes	4.0	U	U	U	U	Û	Ũ	Ü	บี	บ			
Bromoform	2.0	'n	U	U	U	U	Ü	Ú	Ü	U			
Styrene	2.0	U	U	ับ	υ	ט	Ü	U	Ü	Ü			
o-Xylene	2.0	Ü	Ū	U	υ	Ŭ.	Ŭ	U"	Ü	Ū			
n-Nonane	2.0	Ü	U	Ü	U	U	U	ט	Ŭ	Ü			
1,1,2,2-Tetrachloroethane	2.0	Ü	U	Ü	U .	U	Ü.	U	U	U			
Cumene n-Promilhenzene	2.0	U	Û	U	U	U	U	U	U	U			
n-Propylbenzene 3-Ethyltoluene	2.0	Ü	บ	Ü	U	U	U	U	U	,U			
4-Ethyltoluene	2.0	Ū	Ü	Ü	U	U U	U	บ	บ	U			
1,3,5-Trimethylbenzene	2.0	U	_ U_	Ü.	Ü	ΰ	Ü	υ	υ	U U			
2-Ethyltoluene	2.0	Ü	U	Ü	Ü.	ΰ	Ü	Ü	U	Ü			
1,2,4-Trimethylbenzene	2.0	U	Ü	U	Ú	Ü.	Ü	Ū	. ប	Ü			
n-Decane	2.0	U	Ü	U	U	U	Ü	Ü	U	U			
1,3-Dichlorobenzene	2.0	U	U	U	U	U	Ü	Ü	U	U			
1,4-Dichlorobenzene	2.0	U	U	U	U	U	Ű	Ū	U	Ü			
4-Isopropyltoluene (p-Cymene)	2.0	Ų	U	, U	U	U	Ü	Ū	U	U			
1,2,3-Trimethylbenzene	2.0	U	U.	U	U	Ù	Ü	υ	U	U			
1,2-Dichlorobenzene	2.0	U	U	U	U	Ű	U	U.	Ū	υ			
1,2,4-Trichlorobenzene	2.0	U	U	Ü	U	U	U	U	U	υ			
Naphthalene	2.0	U	U	Û	U	U	U	U	U	U			
Hexachlorobutadiene	2,0	Ü	U	U	U	U	Ü	Ü	U	U			

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to pphy; conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

	67/2 N/26/400000	,	.,					<i>i</i>			
Sample ID:	6	AA-	004-03141		AA-	005-03141		AA-006-031512-001			
Date:			3/14/2012	?	ļ.,	3/14/2012		3/15/2012			
Sample Volume (liters)			4.0 Liter			4.0 Liter			4.01 Liter	<u> </u>	
Matrix			Air			Âir			Air		
Volotiles	ng/Tube	ng/Tube	ug/m	PPB(v/v)	up/Tube	ug/m	PPB(v/v)	ng/Tube	ug/m	PPB(WV)	
Dichlorodifluoromethane (CFC 12)	2.0	2.50	0.64	0.13	6.1	1.5	0.31	U	U	U	
1,2-Dichloro-1,1,2,2-						l	 	۱.,	١	l	
tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U _	U	U	
Vinyl Chloride 1.3-Butadiene	2.0	ש	บ	U	บ์	U	U	Ù.	U	Û	
Chloroethane	2.0	U	U	บ	Ü	U	บ	บ	U	U	
Acetone	10	Ü	U	บ	U	U	บ	U U	ט	Ü	
Trichlorofluoromethane	2.0	Ü	U	U	บ	U	U	บ	υ	Ü	
1.1-Dichloroethene	2.0	Ü	U	U	Ü	U	υ	Ü	U	u u	
Methylene Chloride	5.0	Ü	U	Ü	Ü	U	U	Ū	Ü	U	
Trichlorotrifluoroethane	2.0	U	U	Ū	2.4	0.61	0.11	U	Ū	Ü	
trans-1,2-Dichloroethene	2.0	Ü	U	Ù	Ü	U	U	Ü	Ü	Ū	
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	Ü	UI	UJ	
2-Butanone (MEK)	2.0	U	U	U	Ü	U	U	U	U	U	
cis-1,2-Dichloroethene	2.0	Ü	U	Ü.	Ü	ΰ	U	U	U	Ü	
n-Hexane	2.0	Ü	U	U	Ü	υ	U	U	U	U	
Chloroform	2.0	U	Ū,	U	Ü	U	U	U	U	U	
I,2-Dichloroethane	2.0	Ü	บ	Ü	บ	Ü	U	U	U	U	
1,1,I-Trichloroethane	2.0	Ü	Ù	U	Ű	U	U	U	U	U	
Benzene	2.0	U	Ŭ.	Ù	Ü	Ü	U	Ü	U	U	
Carbon Tetrachloride	2.0	U	Û.	Ù	Ü	U	U	Ü	U	U	
1,2-Dichloropropane	2.0	U	Ü	U	Ú	U	U	U	U	Ü	
Bromodichloromethane	2.0	บ	U	Ü	U	Ŭ	U	U	U	U	
Trichloroethene	2.0	U	U	Ü	Ű	Ü	Ŭ	Û	U	U	
1,4-Dioxane	2.0	U	U	U	Ű	U.	U	Ü	Ū	Ü	
2,2,4-Trimethylpentane	2.0	Ū ·	U	U	U	Ü	U	U_	Ü	Ü	
n-Heptane	2.0	U	U	Ŭ	U	Ŭ	U	U	Ù.	Ü	
4-Methyl-2-pentanone	2.0	U	ับ	Ü	บ	U	Ù	U	U	Ü	
1,1,2-Trichloroethane Toluene	2.0	Ü	U	U	U	U	U	Ü	U	U_	
2-Hexanone	2.0	Ü	U	U	Ü	U	Ü	U	U	U .	
Dibromochloromethane	2.0	υ	Ü	บ	U.	Ü	U	U	Ŭ	U	
1,2-Dibromoethane	2.0	Ü	U	υ	U	U	U. U	U	Ü	U	
n-Octane	2.0	Ü	U	U	U	U	U	U	υ	U	
Tetrachloroethene	2.0	Ũ	Û	Ü	U	Ū	υ	Ü	U	U	
Chlorobenzene	2.0	Ü	U	Ü	ΰ	Ü	U	Ü	U	U	
Ethylbenzene	2.0	U	Ü	Ü	υ	νÜ	U	U	U	Ü	
m,p-Xylenes	4.0	U	Ü	U	U	Ū	บ	Ü	U	Ū	
Bromoform	2.0	Ü	Ū	Ŭ	ับ	Ü	Ü	Ü,	Ü	U	
Styrene	2.0	Ų	U	Ũ	U	ΰ	Ū	U	U	U	
o-Xylene	2.0	Ų	U	Ü	U	Ū	Ù	Ü	U	υ	
n-Nonane	2.0	Ŭ	U	U	Ü	Ü	U	Ü	U	Ü	
1,1,2,2-Tetrachloroethane	2.0	Ų	U	Ü	U.	U	Ū	Ü	U	Ü	
Cumene	2.0	Ü	U	Ū	U	U	Ü	Ü	Ü	U	
n-Propylbenzene	2.0	Ü	U	U	U	U	U	U	U	Ű	
3-Ethyltomene	2.0	Ü	Ü	ับ	บ	U	U	U	Û	JÜ	
4-Ethyltoluene	2.0	Ú	U	Ü	U	U ·	U	Ü	U	Ü	
1,3,5-Trimethylbenzene	2.0	U	Ü	U	U	U	Ü	Ų	U.	Ú	
2-Ethyltoluene	2.0	U	U	υ	U	U	U ·	U	Ü	Ŭ	
1,2,4-Trimethylbenzene	2.0	Ü	U	U	บ	U	U	U	U	บ	
n-Decane	2.0	_ Ü	Ü	U	U	U .	U -	Ū	Ų	U	
1,3-Dichlorobenzene	2.0	<u>U</u>	Ū	Ü	U	U	U	U	U	U	
1,4-Dichlorobenzene	2.0	U	Ü	Ü	U	U	Ü	Ü	U	υ	
4-Isopropyltoluene (p-Cymene)	2.0	U	U	·U	U	υ	U	· U	U	U.	
1,2,3-Trimethylbenzene	2.0	Ü	Ü	U	U	υ	U	บ	U	<u>u</u>	
1,2-Dichlorobenzene	2.0	Ū	Ű	U	U	U	υ	U	U	U	
1,2,4-Trichlorobenzene	2.0	Ü	Ü	U	U	U	U	U	U	Ú	
Naphthalene	2.0	Ü	U	U	U.	U	U	U	Ü	Ü	
Hexachlorobutadiene	2.0	U	Ū	Ü	U	U	Ų	U	Ü	Ü	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume,molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tibe/sample volume in liter=ng/L=ug/m3.

ug/m3 to pphy: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

·		·						FB-031512-001			
Sample ID:		AA-	007-03151 3/15/2012		AA-	008-03151 3/15/2012	<u> </u>	7B-031512-001 3/15/2012			
Sample Volume (hiers)			4.01 Liter			4.01 Liter			3/13/2012 NA		
Matrix			Air			Air		· · · · · ·	Air		
Volatiles	ng/Tube	ng/Tube		PRESSOR	ne/Tube		PPB(v/v)	nio/Tube		PPB(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	υ	U	U	U	U	U	U	U	U	
1,2-Dichloro-1,1,2,2-											
tetrafluoroethane (CFC 114)	2.0	U	. U	U.	U	บ	U	U	U	U	
Vinyl Chloride	2.0	U	U	U	U	U	U	U	, Ŭ , ,	U	
1,3-Butadiene Chloroethane	2.0	Ü	U	U	U	Ü	U	Ü	Û	U	
Acetone	2.0	บ	U U	U U	U	U	Ü.	ָ ט	Ü	U	
Trichlorofluoromethane	2.0	บ	U	υ ·	Ü	υ	บ	υ	ט	U	
1.1-Dichloroethene	2.0	Ü	U	U	U	บ	<u>ט</u>	U	U	U	
Methylene Chloride	5.0	U	บ	บ	U	Ü	U	Ü	Ū	U	
Trichlorotrifluoroethane	2.0	Ü	U	บ	Ü	Ü	U	Ü	Ü	Ū	
trans-1,2-Dichloroethene	2.0	U	U	Ŭ.	.U	Ū	Ü	υ	Ü	U	
1,1-Dichloroethane	5.0	ŰJ	UJ	UJ	ÜJ	UJ	UJ	UJ	UJ	UJ	
2-Butanone (MEK)	2.0	Ū	U	U	U	U	U	Ü	Ŭ	U	
cis-1,2-Dichloroethene	2.0	Ü	บ	Ü	Ù	U	U	U	U	U	
n-Hexane	2.0	U	U	U	Ù	U	Ú	Ü	Ü	U	
Chloroform	2.0	U	U	U	U	บ้	Ũ	Ü	U	U	
1,2-Dichloroethane	2.0	ΰ	Ü	U	Ü	U	Ú	Ü	Ü	U	
1,1,1-Trichloroethane Benzene	2.0.	U	Ü	U	Ü	U	Ü	U	U	U	
Carbon Tetrachloride	2.0	Ü	U	Ü	Ü	U	Ú	Ü	U	U	
1,2-Dichloropropane	2.0	Ü	บ	Û	์ บั	บ	U U	Ü	บ	U	
Bromodichloromethane	2.0	U	บ	Ü	Ù	Ü	Ü	Ü	Ü	U	
Trichloroethene	2.0	U	U	U	Ü	Ü	Ü	บ	บ	U	
1,4-Dioxane	2.0	Ü	U	U	U	U	Ü	Ü	Ü	Ü	
2,2,4-Trimethylpentane	2.0	U	Ū	Ü	U	U	U	U	Ü	U	
n-Heptane .	2.0	U	υ	U	U	U	U	U	Ű	υ	
4-Methyl-2-pentanone	2.0	Ü	Ū	บ	U	Ü	Ū	U	Ü	Ü	
1,1,2-Trichloroethane	2.0	U,	U	U	Ū	Ü	U	U	Ü	U	
Toluene	2.0	U	U	Ü	U	U	U	U	Ŭ	U	
2-Hexanone	2.0	· U	Ü	U	Ŭ	U	U	U	U	U	
Dibromochloromethane	2.0	U	Ü	U	U	U	U	U	\U	U	
1,2-Dibromoethane n-Octane	2.0	. <u>U</u>	U	U	U	U	U	U	U	U	
Tetrachloroethene	2.0	Ü	Ü	U.	U	U	U	U	U	Ü	
Chlorobenzene	2.0	U	Ü	บ	บ	U	U. U	Ü	υ	บ	
Ethylbenzene	2.0	Ü	Ü	Ű	U	U	Ů	U	U	Ü	
m,p-Xylenes	4.0	U-	Ũ	Ü	Ü	Ü	บ	Ü	บ	U	
Bromoform	2.0	U	Ü	U	Ü	Ü	U.	U	U	U	
Styrene	2.0	U	U	Ü	Ü	Ü	Ū	υ	U	Ū	
o-Xylene	2.0	Ü	U	U	Ú	Ü	U	U	U	Ü	
n-Nonane	2.0	Ü	U	Ü	U	Ü	Ü	U	Ù	บ	
1,1,2,2-Tetrachloroethane	2.0	U	U	U	υ	Ü	Ü	บ	U	U	
Cumene n-Propylbenzene	2.0	U	U	U	Ŭ	U	Ü	U	Ü	Ü	
3-Ethyltoluene	2.0	์ บ บ	U U	U	บ	Ü	U	U	Ü	Ü	
4-Ethyltoluene	2.0	Ù	U	U	บ	U	U,	U	U	Û	
1,3,5-Trimethylbenzene	2.0	Ü	U	Ů	Ü	Ü	U,	Ü	บ	บ	
2-Ethyltoluene	2.0	Ü	Ü	U	Ü	υ	Ü	U	บ	<u>ט</u>	
1,2,4-Trimethylbenzene	2.0	Ū	U	U	U	Ü	U	U	U	น	
n-Decane	2.0	Ű	U	Ú	υ	U	Ŭ.	U	U	บ	
1,3-Dichlorobenzene	2.0	U	U.	Ŭ	U	U	U	Ü	U	U	
1,4-Dichlorobenzene	2.0	_ U.	Ü	Ü	U	U	U	Ü	U	_ U	
4-Isopropyltoluene (p-Cymene)	2.0	U	Ű	Ű	U	U	U	U	U	U	
1,2,3-Trimethylbenzene	2.0	Ü	Ű	U	U	U	U	U	U	Ü	
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	Ŭ	U	
1,2,4-Trichlorobenzene	2.0	U	U	Ü	U	, U	U	บ	Ü	U	
Naphthalene	2.0	Ü	U	U	U.	U	U	Ü	Ū	Ü	
Hexachlorobutadiene	2.0	บ	Ü	U	U	U	U	Ü	U	Ü	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ng/m3 to ppbv; conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value Dilution Factor: 1

Sample ID:		AÄ.	009-03191	2.001	1 44	010-03191	2.001	AA-011-031912-001			
Date:		- 7.7-1	3/19/2012		AAA	3/19/2012		3/19/2012			
Sample Volume (liters)			4.0 Liter		·	4.42 Lites		<u> </u>	3.71 Lite		
Matrix:			Air	-		Air		· · · · · · · · · · · · · · · · · · ·	Air		
Volatiles	ng/Tube	nn/Tube	08/m	PPB(v/v)	no Tute	ng/m²	FPB(9/v)	ng/Tube	. 154	PPB(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	U	Ū	Ū	4.9	1.1	0.22	υ	U	U	
1,2-Dichloro-1,1,2,2-	*******										
tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	υ	U.	U	U	
Vinyl Chloride	. 2.0	U	U	Ü	Ü	U	U	U	U	U	
1,3-Butadiene Chloroethane	2.0 2.0	Ü	บ	Ü	U	Ü	U	U	U	U	
Acetone	10	Ü	Û	Ù	U	Ü	Ü	Ü	U	U	
Trichlorofluoromethane	2.0	Ü	Ü	Ü	Ü	Ù	U	U	U	U	
1,1-Dichloroethene	2.0	Ū	Ū	Ü	Ü	Ü	U	U	U	U	
Methylene Chloride	5.0	Ü	Ü	Ŭ	Ü	Ü	U	·U	Ü	Ü	
Trichlorotrifluoroethane	2.0	Ü	Ü	Ü	Ü	U	U	U	U	Ü	
trans-1,2-Dichloroethene	2.0	U	U	Ü	Ü	Ù	U	Ú	U	U	
1,1-Dichloroethane	5.0_	UJ	UJ	ÛĴ	Ü	ÜĴ	UJ	UJ	UJ	UJ	
2-Butanone (MEK)	2.0	U	Ü	Ü	Ū	Ü	U	U	Ú	U	
cis-1,2-Dichloroethene	2.0	U	U	Ü	Ü	Ü	U	Ü	Ü	Ü	
n-Hexane Chloroform	2.0	ט ט	U	U	Ü	U	U	Ü	U	U	
1,2-Dichloroethane	2.0	ซ	U	U	Ü	Ū Ū	Ü	Ū	Ü	Ü	
1,1,1-Trichloroethane	2.0	U	U	U	Ū	Ü	U	Ü	Ü	Ü	
Benzene	2.0	U	บ	U	Ü	Ü	Ū	Ü	U	U	
Carbon Tetrachloride	2.0	U	U	U	Ŭ	U	U	U	Ü	U	
1,2-Dichloropropane	2.0	Ü	บ	U	U	U,	υ	Ü	Ū	U	
Bromodichloromethane	2.0	Ü	U	U	υ	U	U.	Ü	U	Ü	
Trichloroethene	2.0	U	U	U	υ	U	U	ט	U	U	
1,4-Dioxane	2.0	Ü	Ü	U	U	U	U	U	ับ	Ü	
2,2,4-Trimethylpentane n-Heptane	2.0 2.0	บ	U	U	บ	U	U.	Ü	U	U	
4-Methyl-2-pentanone	2.0	Ū	Ü	U	U	U	บ	บ	บ	U	
1,1,2-Trichloroethane	2.0	Ü	Ù	ΰ	U .	U	U	U	U	U	
Toluene	2.0	Ü	Ü	Ü	Ŭ	U	Ü	U	U	Ü	
2-Hexanone	2.0	U	<u>ט ֿ</u>	Ű	U	Ü	U	U	Ü	Ü	
Dibromochloromethane	2.0	Ũ	Ü	Ü	U	Ŭ.	Ü	U	U	Ü	
1,2-Dibromoethane	2.0	Ų	U	Ü	Ü	Ú	Ũ	U	U·	U	
n-Octane	2.0	Ü	U	Ü	U	U	Ū	Ü	U	U	
Tetrachloroethene Chlorobenzene	2.0	U	U	U,	U	Ü	Ü	U	U	Ü	
Ethylbenzene	2.0	U	U	U	U	U	Ü	Ü	Ü	Ü	
m,p-Xylenes	4.0	Ū.	U	υ	U	บ	Ü	ΰ	Ü	Ü	
Bromoform	2.0	Ü	Ü	U	Ü	U	U	U	Ü	ΰ	
Styrene	2.0	U	U	U	U	U	บ	U	Ü	Ū	
o-Xylene	2.0	Ü	U	U	U	U	υ	Ŭ	Ű	Ű	
n-Nonane	2.0	Ü	U	U	U	U	Ü	U .	Ü	Ü	
1,1,2,2-Tetrachloroethane	2.0	Ü	U	U	U	U	U	U	U	Ü	
Cumene n-Propylbenzene	2.0	Ŭ Ŭ	Ü	U	U	U	U	U	U	U	
3-Ethyltoluene	2.0	υ	U Ü	U U	Ü	U	U	U U	U.	U	
4-Ethyltoluene	2.0	Ū	U.	Ů	U	Ú	Ü	Ü	Ü	บ	
1,3,5-Trimethylbenzene	2.0	U	ΰ	Ŭ	Ü	U	Ü	U	U	U .	
2-Ethyltoluene	2.0	U	Ü	U	Ü	Ü	Ü	U	U	U	
1,2,4-Trimethylbenzene	2.0	U	U	U	Ü	U	U	U-	บ	U	
n-Decane	2.0	Ų	U	U	Ü	U	Ü	U	Ú	U	
1,3-Dichlorobenzene	2.0	U	U	U	Ü	U	U	U	U	Ü	
1,4-Dichlorobenzene	2.0	U	U	Ü	บ	U	U	Ü	√.U	U	
4-Isopropyltoluene (p-Cymene) 1,2,3-Trimethylbenzene	2.0	U	U	U	U	Ü	Ü	U	U	U	
1,2-Dichlorobenzene	2.0	U	U U	บ	U	U	U U	U	U	U	
1,2,4-Trichlorobenzene	2.0	U	U	U	U	Ü	Ü	U	U	U	
Naphthalene	2.0	Ü	U	Ü	บ	U	U U	U	U U	U	
Hexachlorobutadiene	2.0	Ū	Ü	Ü	Ü	Ü	Ü	U	U	U	
			~					<u> </u>	Ų	V	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

		,		
Sample ID:		FI	3-031912-	
Date:		<u> </u>	3/19/2012	!
Sample Volume (liters)			ÑĀ	
Matrix	77.2365346		Air	Barrens
Volatiles	ng/Tabe			PPB(v/v)
Dichlorodifluoromethane (CFC 12) 1.2-Dichloro-1.1.2.2-	2.0	U	U	U
tetrafluoroethane (CFC 114)	2.0	บ่	Ü	ן ט
Vinyl Chloride	2.0	U	Ü	υ
1,3-Butadiene	2.0	Ù	U	U
Chloroethane	2.0	U	Ü.	Ü
Acetone	10	Ü	υ	Ü
Trichlorofluoromethane	2.0	U	Ü	U
1,1-Dichloroethene	2.0	U	U	บ
Methylene Chloride	.5.0	U	U	U
Trichlorotrifluoroethane	2.0	U	Ü	U
trans-1,2-Dichloroethene	2.0	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ
2-Butanone (MEK)	2.0	Ŭ	U	U
cis-1,2-Dichloroethene	2.0	U	U	U
n-Hexane Chlomform	2.0	Ü	U	U
Chloroform 1.2-Dichloroethane	2.0	U	U	U
1,I,I-Trichloroethane	2.0	Ü	Ü	U.
Benzene	2.0	Ü	Ü	U.
Carbon Tetrachloride	2.0	Ū	Ü	Ü
1.2-Dichloropropane	2.0	U	Ü	U
Bromodichloromethane	2.0	Ü	Ü	Ū
Trichloroethene	2.0	Ü	Ü	υ
1,4-Dioxane	2.0	U	Ü	Ū
2,2,4-Trimethylpentane	2.0	U	U	บ
n-Heptane	2.0	U	U	Ū
4-Methyl-2-pentanone	2.0	U	U	U
1,1,2-Trichloroethane	2.0	U	υ	υ
Toluene	2.0	U	Ü	υ
2-Hexanone	2.0	U	U	U
Dibromochloromethane	2.0	U	U	U
1,2-Dibromoethane	2.0	U	U	U
n-Octane	2.0	Ú	U	U
Tetrachloroethene	2.0	Ü	U	U
Chlorobenzene	2.0	U	U	U
Ethylbenzene	2.0	U	U	U
m,p-Xylenes Bromoform	4.0	Ü	U	U
Styrene	2.0	U	Ü	U
o-Xylene	2.0	ับ	Ü	· Ü
n-Nonane	2.0	U	U	Ü
1,1,2,2-Tetrachloroethane	2.0	U	U U	Ü
Cumene	2.0	U	บ	Ü
n-Propylbenzene	2.0	U	υ	Ü
3-Ethyltoluene	2.0	Ù	บ	U
4-Ethyltoluene	2.0	U	U	U
1,3,5-Trimethylbenzene	2.0	Ü	U	U
2-Ethyltoluene	2.0	Ü	บ	U
1,2,4-Trimethylbenzene	2.0	Ü	U	U
n-Decane	2.0	Ü	U	U
1,3-Dichlorobenzene	2.0	Ü	Ü	U
1,4-Dichlorobenzene	2.0	U	Ü	U
4-Isopropyltoluene (p-Cymene)	2.0	Ü	Ü	U
1,2,3-Trimethylbenzene	2.0	Ü	U	U
1,2-Dichlorobenzene	2.0	U	Ü	U
1,2,4-Trichlorobenzene	2.0	U	U	U
Naphthalene	2.0	U	U	U
Hexachlorobutadiene	2.0	Ü	Ü	υ

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume,molecular weight of compound and factor 24.46 (related to the gas constant). ng/L to ug/m3: ng/tube/sample volume in liter-ng/L=ug/m3.

ug/m3 to ppbv; conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Sample ID:	7		005-03261	2.001	1 443	011-03261	2.001	AA-016-032612-001			
Date:		برتين	3/26/2012		747-	3/26/2012		3/26/2012			
Sample Volume (Iners)			4.29 Liter			4.13 Lite			4.04 Lite		
Matrix	All to		Air		 	Air			Air		
Volatiles	ns/Tube	ne/Tube	up/m	PPB(9/v)	nu/Tube	ug/m	PPB(v/v)	ng/Tabe	ug/m²	PPE(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	Ü	U	U	U	U	U	บ	U	U	
1,2-Dichloro-1,1,2,2-											
tetrafluoroethane (CFC 114)	2.0	U	U	ប	U	U	Ü	ט	Ü	U	
Vinyl Chloride	2.0	Ü	U .	U	U	U	U	U	U	U	
1,3-Butadiene	2.0	U	U	Ü	U	Ü	U	U	Ü	Ü	
Chloroethane	2.0	Ü	U	U	U	U.	U	ָט	Ü	U	
Acetone	10	U	U	Ü	U	U	U	U	U	U	
Trichlorofluoromethane	2.0	Ü	Ŭ U	บ	U U	U	U	U	U	U	
1,1-Dichloroethene	2.0	Ü	U	บ	Ü	Ü	U	U	U	Ü	
Methylene Chloride Trichlorotrifhuoroethane	5.0 2.0	Ü	ซ	U	U	Ü	U	<u>ט</u>	Ü	U	
trans-1,2-Dichloroethene	2.0	U	Ü	Ü	U	-0	U	ט ייי	Ü	U	
1,1-Dichloroethane	5.0	บ	Ü	Ü	U	U	U	U	Ü	U	
2-Butanone (MEK)	2.0	บ	Ü	Ü	U	U	U	U	U	U	
cis-1,2-Dichloroethene	2.0	Ü	U	U	U	U	U	U	U	Ū	
n-Hexane	2.0	บ	Ū	Ū	U	Ü	Ū	Ü	U	U	
Chloroform	2.0	บ	Ū	U	Ü	Ü	U	Ü	U	Ü	
1,2-Dichloroethane	2.0	บ	U	ับ	Ü	U	U	U	Ü	U	
1,1,1-Trichloroethane	2.0	บ	Ü	U	U	U	U	Ū	Ü	υ	
Benzene	2.0	υ	U	U	U	Ü	U	Ū	U,	Ü	
Carbon Tetrachloride	2.0	Ũ	υ	Ü	U	U	Ū	U	U	U	
1,2-Dichloropropane	2.0	Ü	U	U	U	U	U	U	U	U	
Bromodichloromethane	2.0	Ü	Ü	Ü	U	U	Ū	Ü	Ū	U	
Trichloroethene	2.0	Ü	U	U	U	U	Ü	U	U	Ū	
1,4-Dioxane	2.0	U	Ü	U	U	U	U	U	U	Ü	
2,2,4-Trimethylpentane (Isooctane)	2.0	Ü	Ù	U	U	U	U	Ü	Ų	U.	
n-Heptane	2.0	U	U	U	Ŭ	U	Ŭ	U	U	Ü	
4-Methyl-2-pentanone	2.0	U	Ü	ប	Ü	· U	U	Ü	Ü	Ü	
1,1,2-Trichloroethane	2.0	U	Ü	U	U	ñ	U	Ų	U	U	
Toluene	2.0	U	U	U	U	U	ָ עַ	U	Ü	U	
2-Hexanone	2.0	U	U	ับ	U	U	บ	U	U	U	
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	·U	
1,2-Dibromoethane	2.0	U	U	U	Ū	U	U~	Ù	U	U	
n-Octane	2.0	Ù	U	ָ ט	U	U	U	U	U	U	
Tetrachloroethene	2.0	U	U · U	U	U	U	U	U	U	U	
Chlorobenzene	2.0	U		U	U	U	U	U	U	Ü	
Ethylbenzene m.p-Xylenes	2.0 4.0	Ü	U	Ü.	n ,	บ	U	U	v Ü	U	
m,p-Aylenes Bromoform	2.0	บั	U	ָ ט	บ	Ü	ט	U	Ü	U	
Styrene	2.0	U.	Ŭ	U	U	Ü	U	U	U	Ū	
o-Xylene	2.0	บ	Ü	U	U	บ	Ū	U T	U	U	
n-Nonane	2.0	Ü	υ	U	U	U	Ü	U	Ŭ	บ	
1,1,2,2-Tetrachloroethane	2.0	Ü	U	U	Ü	U	U	บ	U	บ	
Cumene	2.0	Ü	บ	Ü	U	Ü	U	U	U	U	
n-Propylbenzene	2.0	U	Ü	υ	บ	U	U	บ	ับ	Ü	
3-Ethyltoluene	2.0	U	บ	. U	U	U	Ü	Ü	U	U	
4-Ethyltoluene	2.0	Ū	Ü	U	Ü	U	Ū	Ü	U	U	
1,3,5-Trimethylbenzene	2.0	U	U	U	Ü	Ū `	U	U	U	U	
2-Ethyltoluene	2.0	Ü	U	U	U	U	· U	Ü	U	Ū	
1,2,4-Trimethylbenzene	2.0	U	Ü	Ū	U	U	U	U	U`	U	
n-Decane	2.0	Ų	U	U	U	υ	U	U	U	U	
1,3-Dichlorobenzene	2.0	U	U	Ü	U	U	U	υ	U	U	
1,4-Dichlorobenzene	2.0	U	U	U	U	U	υ	U	U	U	
4-Isopropyltoluene (p-Cymene)	2.0	บั	U	U	U	Ü	U	U	U,	Ü	
1,2,3-Trimethylbenzene	2.0	U_	Ŭ	U	U	U	U	Ü,	U	U	
1,2-Dichlorobenzene	2.0	\ U	U	U	2.6	0.64	0.11	U	U	U	
1,2,4-Trichlorobenzene	2.0	Ü	U	U	Ų	U	Ü	· U	U	U	
Naphthalene	2.0	Ü	U	U	U	U	U	U	U	Ü	
Hexachlorobutadiene	2.0	Ū	U	U	U	Ü	U	U	U	U	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter-ng/L-ug/m3.

ug/m3 to ppby; conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Sample ID:		AA-	017-03261		F	3-032612-		AA-006-032712-001 3/27/2012			
Date:			3/26/2012	<u> </u>	<u> </u>	3/26/2012	?				
Sample Volume (liters)			3.98 Liter			NA Air		-	4.38 Liter	·	
Matrix:				600000000000			l typip (a.e.)			ppe/s/av	
Dichlorodifluoromethane (CFC 12)	2.0	ug/rune U	Ugan	U	nguuse U	U	U	ng/1000 U	U	Ü	
1,2-Dichloro-1,1,2,2-	2.0	<u> </u>	۰	⊢ ` −		 	<u> </u>	اٽ	ا -	۳	
tetrafluoroethane (CFC 114)	2.0	U	U	U	U	υ	U	ΰ	U	υ	
Vinyl Chloride	. 2.0	U	Ü	ַ ע	Ų	Ü	U	U	U	Ü	
1,3-Butadiene	2.0	U	U	U	Ü	ַ "U	Ü	U	Ü	Ü	
Chloroethane	2.0	U	U	υ	U	U	บั	U	U	Ü	
Acetone	10	U	U	U	U	U	Ü	U.	U	U	
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethene	2.0	Ü	U	U	Ü	U	U,	Ü	U	U	
Methylene Chloride	5.0	U	Ü	U	Ü	U	U	Ú	U	U	
Trichlorotrifhoroethane	2.0	Ŭ	U	U	U	Ų	U	.U	U	· U	
trans-1,2-Dichloroethene	2.0	Ü	U	U	υ	Ü	Ŭ_	Ŭ	Ü	U	
1,1-Dichloroethane	5.0	U	U	U	Ų	U	U	U	U	U	
2-Butanone (MEK)	2.0	U	U	U	U	U	U	Ų	U	. U	
cis-1,2-Dichloroethene	2.0	U	U	U		บ	U	U	U	U	
n-Hexane	2.0	U	U	U	Ü	U	U	Ü	U	U	
Chloroform 1.2-Dichloroethane	2.0	Ü	Ŭ,	U -	U	U	U	Ù	U ·	U	
1,2-Dichloroethane	2.0	U	U	U	U	U U	Ü	Ü	U	U	
Benzene	2.0	Ü	Ü	U	Ü	U	Ü	·U	U	U	
Carbon Tetrachloride	2.0	Ü	U	U	Ü	U	· U	Ü	υ	Ü	
1,2-Dichloropropane	2.0	Ü	บ	U	U	U	U	Û	U	U	
Bromodichloromethane	2.0	U	U	U	บ	U	Ü	Ú	U	U	
Trichloroethene	2.0	U	U	Ü	Ü	U	U -	U.	U	U	
1.4-Dioxane	2.0	U	U	U	U	Ü	U	Ü	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	Ü	Ü	·U	Ü	U	Ü	U	U	U	
n-Heptane	2.0	Ü	Ü	Ü	ΰ	U	U	U	Ü	U	
4-Methyl-2-pentanone	2.0	Ü	U	υ	Ü	U	U	Ü	U	U	
1,1,2-Trichloroethane	2.0	U	U	U	Ü	U	U	U	U	Ü	
Toluene	2.0	U	U	U	U.	U	U	Ũ	U.	U	
2-Hexanone	2.0	U	U	U	U	ับ	Ü	U	Ü	U	
Dibromochloromethane	2.0	Ü	Ü	U	Ü	U	U	U	U	บ	
1,2-Dibromoethane	2.0	Ü	U	U	U	U	Ū	Ú	U.	,U	
n-Octane	2.0	U	U	U	Ū	Ü	U	Û	U	U	
Tetrachloroethene	2.0	U	ט	U	U	U	U	Ū	Ü	U	
Chlorobenzene	2.0	U	U	U.	U	U	U,	Ü	U	U	
Ethylbenzene	2.0	Ü	Ü	U	U	U	U	U	U	U	
m,p-Xylenes	4.0	U	U	U	Ü	Ü	Ŭ	U	U	U	
Bromoform	2.0	Ü	Ü	Ų	Ù	U	Ü	U	Ü	U	
Styrene	2.0	U	U	Ü	Ü	U	U	Ü	Ü	U	
o-Xylene	2.0	U	U	Ü	U	Ų	U	Ü	Ü	U	
n-Nonane	2.0	U	U	U	U	U	U	U	Ü	Ü	
1,1,2,2-Tetrachloroethane	2.0	Ü	U	U	U	U	U	U	U	U	
Cumene p. Promilhenzene	2.0	Ü	U	Ü	Ü	Ü	U	U	U	Ü	
n-Propylbenzene 3-Ethyltoluene	2.0	Ü	Ü	ŭ	U	ก.	U	U	Ü	υ	
4-Ethyltoluene	2.0 2.0	ŭ	Ü	U	Ŭ	Ü	U	Û	U	U	
1,3,5-Trimethylbenzene	2.0	Ü	U	Ü	Ü	U.	ט	U	Ü	ŭ	
2-Ethyltoluene	2.0	Ú	U	บ	Ü	Ŭ	Ü	U	Ü	ָ ט	
1,2,4-Trimethylbenzene	2.0	Ü	Ü	- u -	Ü	U	U	.n.	ΰ	Ü	
n-Decane	2.0	U	U	Ū	Ŭ	U	U	Ü	υ	υ	
1,3-Dichlorobenzene	2.0	Ū	U	Ü	U	U	U	Ū	U	U	
1,4-Dichlorobenzene	2.0	Ü	U	Ü	Ū	U	Ü	U	U	บ	
4-Isopropyltoluene (p-Cymene)	2.0	U	Ü	Ü	U	Ü	Ü	U	Ü	· U	
1,2,3-Trimethylbenzene	2.0	Ü	U	Ü	Ü	U	Ü	Ü	Ū	U	
1,2-Dichlorobenzene	2.0	Ü	U	Ū	Ü	Ü	Ü	. U	Ū	U	
1,2,4-Trichlorobenzene	2.0	U	U	Ū	U	Ū	Ü	U	U	U	
Naphthalene	2.0	U	U	Ü	Ū	Ü	Ü	U	Ü	U	
Hexachlorobutadiene	2.0	U	U	U	U	Ū	·Ū	U	Ü	Ū	
					للتسا	<u> </u>					

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant). ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Sample ID;		AA-	009-03271	2-001	AA-	017-03271	2-001	AA-018-032712-001			
Date:			3/27/2012			3/27/2012			3/27/2012		
Sample Volume (Inters)			4.35 Lite			4.52 Lite			3.96 Lites		
Matrix			Air			Air			Ąjr		
Volatiles	1			PPB(v/v)			PPB(v/v)		***	PPB(vv)	
Dichlorodifluoromethane (CFC 12)	2.0	U	ប	U	2.1	0.47	0.096	Ü	U	U	
1,2-Dichloro-1,1,2,2- tetrafluoroethane (CFC 114)	2.0	บ	υ.	บ	υ	U	Ū	บ	บ	U	
Vinyl Chloride	2.0	Ü	Ü	U	Ü	U	U	U	U	U	
1,3-Butadiene	2.0	U	U	U	Ü	U	U	Ü	Ü	U	
Chloroethane	2.0	· U	U	U	Ü	U	U	Ü	Ü	U	
Acetone	10	U	U	U	Ū	U	U	Ū	U	Ū	
Trichlorofluoromethane	2.0	U	υ	U	υ	U	U	U	U	U	
1,1-Dichloroethene	2.0	U	U	U	U.	U	U	U	U	U	
Methylene Chloride	5.0	U	U	U	Ü	U	U	Ü	U	U	
Trichlorotrifluoroethane	2.0	Ü	U	U	Ü	U	U	Ü	U	Ü	
trans-1,2-Dichloroethene	2.0	U	U	Ų	U	U.	U	Ŭ	Ü	U	
1,1-Dichloroethane	5.0	U	U	U	ט	Ŭ	U	U	U	U	
2-Butanone (MEK)	2.0	Ü	U	U	Ü	บ	U	U	U	U	
cis-1,2-Dichloroethene	2.0	Ü	U	U	Ü	U	U	U.	U	U.	
n-Hexane	2.0	2.5	0.58	0.17	U	U	U	U	Ü	U	
Chloroform	2.0	Ü	U	U	Ü.	Ü	Ŭ	U	Ü	Ü	
1,2-Dichloroethane	2.0	ָטַ	U	U	U	U.	υ	U	U	U	
1,1,1-Trichloroethane	2.0	Ü	Ŭ.	U	U	U	U	Ü	U	Ü	
Benzene	2.0	Ü	U	U	Ü	U	Ü	U	U	Ü	
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane Bromodichloromethane	2.0	U	U '	U	U	U	Ü	U	U	U	
Trichloroethene	2.0	. U	Ü	U	U	U	U	U	U	บ	
1,4-Dioxane	2.0	U	U	U	Ü	U	Ü	Ü	U	ับ	
2,2,4-Trimethylpentane (Isooctane)	2.0	Ü	U	U	U	U	Ü	Ü	บ	<u>ט</u>	
n-Heptane	2.0	ΰ	U	Ü	U	U	U.	Ü	Ü	ט .	
4-Methyl-2-pentanone	2.0	U	Ü	U	U	Ü	U	U	Ü	U	
1,1,2-Trichloroethane	2.0	Ü	U	U	U	บ	Ü	· U	U	U	
Toluene	2.0	5.6	1.3	0.34	Ü	U	· U	Ü	Ü	U	
2-Hexanone	2.0	U	U.	U	U	U	U	Ü	Ü	U	
Dibromochloromethane	2.0	Ú	U	U	U	U	U	U	U	- 0	
1,2-Dibromoethane	2.0	U	U	Ü	U	U	U	Ú	U	Ü	
n-Octane	2.0	2.3	0.53	0.11	υ	Ü	U	U	U	U	
Tetrachloroethene	2.0	υ	Ū	Ų	U	U	υ	Ú	· U	Ü	
Chlorobenzene	2.0	3.3	0.77	0.17	Ū	U	Ü	U	U	Ú	
Ethylbenzene	2.0	U	U ·	U	Ü	U	U	Ü	Ü	U	
m.p-Xylenes	4.0	U	Ü	U	Ü	U	U	Ü	U`	Ü	
Bromoform	2.0	Ü	U	Ü	U	Ü	U	Ų	U	Ü	
Styrene	2.0	U	Ų	U	U	υ	Ü	U	U	Ü	
o-Xylene	2.0	Ü	U	U	U	Ŭ	ŭ	Ü	U	Ü	
n-Nonane	2.0	Ü	U	<u>ū</u>	Ü	U	U	Ü	U	U	
1,1,2,2-Tetrachloroethane	2.0	Ü	U	Ü	U	U	U	Ü	U	U	
Cumene n-Propylbenzene	2.0 2.0	U U	U	บ	U , U	U	U	U	U	ับ	
3-Ethyltoluene	2.0	U	Ü	Ū	U	U	U	U	U	U	
4-Ethyltoluene	2.0	U	ΰ	Ü	U	Ü	ΰ.	U	Ü	Ü	
1,3,5-Trimethylbenzene	2.0	U	U	υ	U	U	υ	Ü	ט י	U	
2-Ethyltoluene	2.0	U	Ü	Ü	Ü	Ü	U	U.	Ü	Ü	
1,2,4-Trimethylbenzene	2.0	Ū	Ü	U	U	U	U	υ	U	Ū	
n-Decane	2.0	6.0	1.4	0.24	Ū	Ū	U	U	Ü	U	
1,3-Dichlorobenzene	2.0	U	U	υ	U	U	U	บ	U	Ū	
1,4-Dichlorobenzene	2.0	บ	Ü `	¥	U	U	U	U	Ū	Ü	
4-Isopropyltoluene (p-Cymene)	2.0	U	Ū	U	U	Ü	U	Ü	U	Ū	
1,2,3-Trimethylbenzene	2.0	υ	, U	Ü	U	Ų	U	U	Ū	U	
1,2-Dichlorobenzene	2.0	4.6	1.0	0.17	2.6	0.58	0.096	U	U	U	
1,2,4-Trichlorobenzene	2.0	υ	U	. U	Ü	U	U	U	Ū	U	
Naphthalene	2.0	Ū	U	U	Ü	Ü	Ü	U	U	Ü	
Hexachlorobutadiené	2.0	Ü	U	U	U	U	U	U	Ū	Ū	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ng/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppby: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Sample ID:		- G	-032712-0	101	A A	06-03281	2-001	AA-010-032812-001			
Date:		FI	3/27/2012		7,7-1	3/28/2012		3/28/2012			
Sample Volume (liters)			NA			3.81 Liter			4.11 Liter		
Marik			Air			Air			Air		
	ne/Tabe	ng/Tuxe	vis/m²	PPB(v/v)	ne/Tube	0£/m	PPB(v/v)	ng/Tube	ug/m	PPB(VA)	
Dichlorodifluoromethane (CFC 12)	- 2.0	U	U	U	2.1	0.47	0.096	Ü	บ	Ü	
1,2-Dichloro-1,1,2,2-											
tetrafhuoroethane (CFC 114)	2.0	บ	U	U	U	U	U	ŭ	U	U	
Vinyl Chloride	2.0	U	U	U	Ŭ	บ	Ü	U	U ·	U	
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	
Chloroethane	2.0	Ü	U	U	U	Ų	U	Ü	U	U	
Acetone	10	U	U	U	U	U	U	U	บ	U	
Trichlorofluoromethane	2.0	U	U	U	U	บ	U	ย	U	Ü	
1,1-Dichloroethene	2.0	U	. บ	บ	U	U	U	Ü	U	U	
Methylene Chloride	5.0	U		U	υ	U	U~	U	ָ ט	U	
Trichlorotrifluoroethane	2.0	Ü	U	. U	U	ט	U	U	U	U	
trans-1,2-Dichloroethene	2.0 5.0	Ü	U	U	υ	U	U	UJ	UJ	UJ	
1,1-Dichloroethane		U	/U	U	U	U	Ü	U	U	U	
2-Butanone (MEK) cis-1,2-Dichloroethene	2.0	บ	Ü	U	U	U	U	Ü	U	u	
n-Hexane	2.0	U	Ü	U	U	Ū	U	υ	U	U	
n-Hexane Chloroform	2.0	U	υ	U	U	U	U	Ü	U	U	
1.2-Dichloroethane	2.0	U	U	U	U	Ū	Ū	Ü	Ū	Ü	
1,1,1-Trichloroethane	2.0	U	Ū	U	Ü	U	U	Ü	U	Ü	
Benzene	2.0	บ	Ü	Ū	U	U	U	U	Ü	Ū	
Carbon Tetrachloride	2.0	Ů	U	Ū	Ü	U	U	U	υ	· U	
1,2-Dichloropropane	2.0	U	U	Ü	U	υ	Ū	υ	U	U	
Bromodichloromethane	2.0	U	U /	U	U	Ü	U	U	U	Ü	
Trichloroethene	2.0	U	U	U	υ	U	Ū	U	U	U	
I,4-Dioxane	2.0	υ	U	U	U	U	U	υ	U	Ü	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	Ü	υ	U	U	U	U	U	
n-Heptane	2.0	Ù	บ	Ū	U	U	U	U	U	Ü	
4-Methyl-2-pentanone	2.0	Ų.	U	U	U	U	υ	Ų	U	υ	
1,1,2-Trichloroethane	2.0	Ü	Ü	U	U	U	U	U	U	U	
Tokuene	2.0	Ü	U	U	U.	U	Ü	U	U	U	
2-Hexanone	2.0	ŭ	Ü	U	U	Ü	U	υ	Ü	U	
Dibromochloromethane	2.0	U	Ü	U	U	Ų	Ü	U	U	U	
1,2-Dibromoethane	2.0	Ű	U	U	U	Ü	U	Ū	U	U	
n-Octane	2.0	. 0	Ü	Ü	U	Ü	U	U	U	U	
Tetrachloroethene	2.0	Ü	Ü,	U	υ	U	U	U	U	U	
Chlorobenzene	2.0	Ų	U	Ų	U	U	U	U	U	U	
Ethylbenzene	2.0	U	U	U	U	Ü	U	Ü	U	Ü	
m,p-Xylenes	4.0	U	'U	U	Ü	U	U	U	U	U	
Bromoform	2.0	U	U	U	Ü	Ü	U	U	Ü	U	
Styrene	2.0	Ü	Ų	U T	U	Ų	U	U	บ	U	
o-Xylene	2.0	U	U	U	U	U	U	Ü	U	U	
n-Nonane	2.0	. บ	U	U	Ū	· U	Ü	Ü	U	Ü	
1,1,2,2-Tetrachloroethane	2.0	·	Ü	U	ט	U	U	U	U	U	
Cumene	2.0	Ü	U	U	U	U	- U	- U	U	U	
n-Propylbenzene 3-Ethyltohiene	2.0	U.	U	υ	U	U	U	บ	U.	U U	
4-Ethyltoluene	2.0	Ü	U.	υ	U	U	U	บ	Ü	U~	
1,3,5-Trimethylbenzene	2.0	Ü	U	U	Ū	U	U	U	Ü	U	
2-Ethyltohiene	2.0	ΰ	U	U	Ū	U	U	U	U	U	
1,2,4-Trimethylbenzene	2.0	Ü	U	Ü	υ	U	U	U	U	U	
n-Decane	2.0	U	Ü	Ü	U	Ü	Ü	Ü	U	U	
1,3-Dichlorobenzene	2.0	Ü	U	U	Ü	U	U	Ü	U	U	
1,4-Dichlorobenzene	2.0	ΰ	Ü	Ü	. υ	Ü	Ü	Ü	Ü	. U	
4-Isopropyltoluene (p-Cymene)	2.0	Ů	U	U	U	Ü	U	U	U	Ü	
1,2,3-Trimethylbenzene	2.0	Ü	Ū	U	υ	Ü	U	Ū	Ü	Ü	
1,2-Dichlorobenzene	2.0	Ü	U	Ü	2.6	0.58	0.096	Ü	Ü	Ü	
1.2,4-Trichlorobenzene	2.0	Ü	U	Ū	U "	U	U	Ü	u	U	
Naphthalene	2.0	Ù	U	U	- U	Ü	U	U	U	U	
Hexachlorobutadiene	2.0	,U	U	U	U	U	U	U	Ü	U	

Note: - Sample results and Method Reporting Limit (MRL) reportedhave been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

<u>ng/L to ug/m3</u>: ng/tube/sample volume in liter-ng/L=ug/m3.

ug/m3 to ppby; conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Sample ID Date Sample Volume (liters) Maritze Volatiles Dichlorodifluoromethane (CFC 12) 1,2-Dichloro-1,1,2,2- terrafluoroethane (CFC 114) Vinyl Chloride 1,3-Butadiene	ng/Tube		016-03281 3/28/2012 4.3 Liter Air		FI	3-032812-0 3/28/2012 NA				
Sample Volume (liters) Matrix Volatiks Dichlorodifluoromethane (CFC 12) 1;2-Dichloro-1,1,2,2- terrafluoroethane (CFC 114) Vinyl Chloride	2.0	ni/Tube	4.3 Liter							
Matrix Volatiks Dichlorodifluoromethane (CFC 12) 1;2-Dichloro-1,1,2,2- tetrafluoroethane (CFC 114) Vinyl Chloride	2.0	niv/frabe	12. 12. 121.			NA .				
Dichlorodifluoromethane (CFC 12) 1;2-Dichloro-1,1,2,2- tetrafluoroethane (CFC 114) Vinyl Chloride	2.0	niz/Enthe				Air				
Dichlorodifluoromethane (CFC 12) 1,2-Dichloro-1,1,2,2- terrafluoroethane (CFC 114) Vinyl Chloride	2.0			New York	no/fubr		PPB(e/v)			
1,2-Dichloro-1,1,2,2- tetrafluoroethane (CFC 114) Vinyl Chloride		U	Ü	U	U	U	U			
Vinyl Chloride						 				
	2.0	ַָּט	U	U	U	ט	U			
1,3-Butadiene	2.0	U	U	U	υ	U	U			
	2.0	U	U	U	U	Ü	U			
Chloroethane	2.0	Ü	บ	บ	บ	U	U			
Acetone Trichlorofluoromethane	10	· U	ט	Ü	บ	Ü	U			
1.1-Dichloroethene	2.0	บ	ש	Ü	ΰ	U	U			
Methylene Chioride	5.0	U	U	U	Ü	Ü	U			
Trichlorotrifluoroethane	2.0	U	Ü	Ü	Ü	Ü	U			
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U			
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ			
2-Butanone (MEK)	2.0	U	U	U	U	U	U			
cis-1,2-Dichloroethene	2.0	U.	U	U	U	¥	Ü			
n-Hexane	2.0	Ų	U	Ū	U.	Ü	U			
Chloroform	2.0	U	U	U	Ū	U	Ü			
1,2-Dichloroethane	2.0	U.	U	U	Ų	Ü	Ü			
1,1,1-Trichloroethane	2.0	U	U	Ü	U	U	U			
Benzene	2.0	U	Ü	U ·	U	U	U			
Carbon Tetrachloride	2.0	U U	บ	U	Ü	Ü	U			
1,2-Dichloropropane Bromodichloromethane	2.0	บ	Ü	Ü	U	U	n			
Trichloroethene	2.0	บ	Ü	Ü	U	U	U			
1,4-Dioxane	2.0	U	U	Ü	U	U	Ü			
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	Ü	Ü	U	Ü.			
n-Heptane	2.0	U	Ü	Ü	Ü	Ü:	U			
4-Methyl-2-pentanone	2.0	Ü	U	U	Ü	U	Ü			
1,1,2-Trichloroethane	2.0	Ü	U	Ų	U	Ü	Ü			
Toluene	2.0	U	U	· U	Ų	U	υ			
2-Hexanone	2.0	U	Ú	Ü	U	U	U			
Dibromochloromethane	2.0	U	U	U	Ü	U	U			
1,2-Dibromoethane	2.0	U	Ü	U	Ü	U	, U			
n-Octane	2.0	U	U	U	Ü	บั	Ų			
Tetrachloroethene	2.0	U	U	U	Ü	U	U			
Chlorobenzene	2.0	U	U.	U	U	U	U			
Ethylbenzene m n Yulenen	2.0	<u>U</u>	U	ย	Ü	บ	U			
m,p-Xylenes Bromoform	2.0	U.	ñ	Ü	Ü	Ü	ט			
Styrene	2.0	U	U	Ü	Ü	Ü	U			
o-Xylene	2.0	บ	U	U	U	U	U			
n-Nonane	2.0	Ü	U	Ü	U	U	U			
1,1,2,2-Tetrachloroethane	2.0	Ü	ับ	U	ับ	U	U			
Cumene	2.0	Ü	U	· U	Ü	Ü	Ú			
n-Propylbenzene	2.0	Ū	U	U	Ü	U	ŷ			
3-Ethyltoluene	2.0	ָטָ	U	U	U	U	U			
4-Ethyltoluene	2.0	U	Ü	U	U	Ū	Ų			
1,3,5-Trimethylbenzene	2.0	Ü	U	υ	Ű	Ü	U			
2-Ethyltoluene	2.0	υ	U	Ų	Ü	U	U			
1,2,4-Trimethylbenzene	2.0	U	U	U	Ü	U	U			
n-Decane 1,3-Dichlorobenzene	2.0	U	U	U	Ü	U	U			
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U			
4-Isopropyltoluene (p-Cymene)	2.0	U	บ	Ü	U	Ü	U			
1,2,3-Trimethylbenzene	2.0	U	Ū	Ü	U	U	Ü			
1,2-Dichlorobenzene	2.0	υ	U	Ü	Ü	ט	Ü			
1,2,4-Trichlorobenzene	2.0	U	U	U	Ü	U	U			
Naphthalene	2.0	Ü	U	υ	Ü	U	U			
Hexachlorobutadiene	2.0	Ū	Ü	Ü	Ü	Ü	Ü.			

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppby: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Sample ID:		AA-	009-03291	2-001	AA-	010-03291	2-001		017-03291	2-001
Date:		3.7.5	3/29/2012			3/29/2012			3/29/2012	
Sample Volume (iners)	i e		4.07 Liter			3.59 Lite			3.96 Liter	
Matrix			Air			Air			Air	
Volunies	ng/Tube	10/Pube	48/40	19920(40)	ng/Tube	ug/m	OPE(vA)	my/Fribe	ug/m	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	Ü	Ü`	Ü	U	U	U	U	บ	U
1,2-Dichloro-1,1,2,2-		77	U	U		7,	U	7.7	υ	77
tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride 1.3-Butadiene	2.0	ָ ט	U	U	<u>ט</u>	U	U	U	U	טי
Chlomethane	2.0	Ü	U	U	U	U	บ	U	U	U
Acetone	10	U	U	Ü	16	4.5	1.9	Ü	U	U
Trichlorofluoromethane	2.0	U	U	· U	U	U	U	Ü	Ū	Ü
1,1-Dichloroethene	2.0	Ü	Ü	υ	บ	U	U	U	Ū	Ü
Methylene Chloride	5.0	U	Ū	U	Ü	7 0	U	Ü	U'	U
Trichlorotrifluoroethane	2.0	Ù	Ţ	Ū	U	U	U	U	υ	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	Ü	U	Ū.
1,1-Dichloroethane	5.0	UJ	IJ	បរ	UJ	UJ	ÚJ	ÜJ	Ū	ÜĴ
2-Butanone (MEK)	2.0	U	. U	U	U	Ü	U	U	U	Ü
cis-1,2-Dichloroethene	2.0	Ū	U	U	U	Ü	U	U	υ	. U
n-Hexane	2.0	U	U	U	ָ ט	Ü	Ü	Ü	. บ	Ü
Chloroform	2.0	Ü	<u>U</u>	Ŭ	Ü	U	U	U	U	Ü
1,2-Dichloroethane	2.0	U	U /	U	ט	U	U	U	U	ŭ
1,1,1-Trichloroethane	2.0	U	U	Ų	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride 1.2-Dichloropropane	1 2.0	Ü	ט	Ü	บ	Ü	U	n .	บ.	U
Bromodichloromethane	2.0	. U	U	. U.	U	U	U	U	U	Ü
Trichloroethene	2.0	U	Ū	U	U	Ü	บ	U	U	U
1,4-Dioxane	2.0	U	U	U	Ü	Ü	U	Ü	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	Ü	Ü	Ü	Ü	U
n-Heptane	2.0	Ü	Ū	U	ΰ	Ü	U	U	U	U
4-Methyl-2-pentanone	2.0	Ü	Ü	U	U	Ü	U	U	U	Ü
1,1,2-Trichloroethane	2.0	U	บ	U	Ų	៊ប	U	U	U	Ū
Toluene	2.0	U	Ü	U	2.0	0.56	0.15	บู	Ų	ŭ
2-Hexanone	2.0	Ŭ	Ü	Ü	IJ	U	U	U	U	U
Dibromochloromethane	2.0	Ü	U	U	U	U	Ü	Ü	U	Ü
1,2-Dibromoethane	2.0	Ü	U	U	Ü	U	U	U	U	U
n-Octane	2.0	U	U	Ū	Ų	U	υ	U	U	Ü
Tetrachloroethene	2.0	U	U´	U	Ü	U	Ü	U	Ü	U
Chlorobenzene	2.0	Ü	U	n ñ	U	U	U	U	Ų	U
Ethylbenzene m.p-Xylenes	2.0 4.0	U U	U	Ü	Ü	U	U	U	U	U
Bromoform	2.0	Ü	U	U	ט	Ü	U	U	Ü	Ü
Styrene	2.0	Ü	Ü	<u> </u>	יטי	U	U	U	U	Ü
o-Xylene	2.0	Ū,	U	Ū	Ü	U	U	U	บ	U
n-Nonane	2.0	U	U	U	Ü	υ	Ü	U	ับ	U
1,1,2,2-Tetrachloroethane	2.0	U	υ	U	Ū	U	Ü	U	Ū	U
Cumene	2.0	Ü	υ'	U	Ū	Ù	Ü	υ	U.	U
n-Propylbenzene	2.0	Ū	U	บ	Ŭ	U_	ŭ	Ü	U	U
3-Ethyltohiene	2.0	U	U	U	U	U	ับ	Ų	U	U
4-Ethyltoluene	2.0	U	บ	U	U	U	Ü	บ	U	Ū
1,3,5-Trimethylbenzene	2.0	Ü	U	U	U	U	ប	ט	U	U
2-Ethyltohiene	2.0	Ü	U	Ü	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	Ü	U	U	U	บ	Ü	2	Ü	U
n-Decane 1,3-Dichlorobenzene	2.0	Ų	U	Ü	5.3	1.5	0.25	U	U	U
1,4-Dichlorobenzene	2.0	บ	บ	บ	บ	U	U	U	U	Ų
4-Isopropyltoluene (p-Cymene)	2.0	U	U	ש	บ	U ·	U	U ·	U	U
1,2,3-Trimethylbenzene	2.0	Ü	U	U	Ü	U.	Ü	Ü	U	U
1,2-Dichlorobenzene	2.0	Ü.	U	Ü	U	Ü	Ü	ΰ	U	U
1,2,4-Trichlorobenzene	2.0	Ü	บ	U	Ü	U	Ü	ש	Ü	U
Naphthalene	2.0	บ	Ü	Ü	U	Ü	U	Ü	Ü	Ü
Hexachlorobutadiene	2.0	ซ	Ü	Ü	-0	U	U	U	U	U
The second secon		<u> </u>			سني				<u> </u>	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Cample ID		AA-	018-03291	2-001	FI	3-032912-0	001	AA-	000-03301	2-001
Date			3/29/2012			3/29/2012			3/30/2012	
Sample Volume (liters)			3.52 Liter			NA	· · · · · · · · · · · · · · · · · · ·		3.9 Liter	
Matrix ******			Air			Air			Air	
Volatiles	ng/Tube	ng/Tube	09/11	PPB(v/v)	ng/Lube	ngm	PPB(v/v)	ng/Fube	ug/m	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	3.0	0.84	0.17	Ū	U	U.	2.2	0.57	0.11
1,2-Dichloro-1,1,2,2-			.,	.,			,,	·		
tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	บ	U
Vinyl Chloride 1,3-Butadiene	2.0	U	U	Ü	U	U	U	U	U.	Ü
Chloroethane	2.0	U	บ	Ü	U	U	Ū	ט	Ū	Ü
Acetone	10	17	4.8	2.0	U	U	U	ับ	Ū	Ū
Trichlorofluoromethane	2.0	U	Ü	Ü	U	U	U	Ü	Ü	U
1,1-Dichloroethene	2.0	U	Ū	U	U	U	U	U	Ü	U
Methylene Chloride	5.0	U	U ·	U	U	U	U	U	U	υ
Trichlorotrifluoroethane	2.0	U	U	U	บ	U	U	U.	Ü	U
trans-1,2-Dichloroethene	2.0	Ü	Ü	Ŋ	U	U	Ü	Ŭ	ຸ ປັ	υ
1,1-Dichloroethane	5.0	UJ	UJ	UJ	Ü	UJ	ŪJ	យ	W	UJ
2-Butanone (MEK)	2.0	Ų	U	Ų	U	U	Ü	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	υ	U	U	U	U	U	U
n-Hexane	2.0	Ü	U U	U	U U	U	U	Ü	U	Ų
Chloroform 1.2-Dichloroethane	2.0	Û	ט	U	U	U	Ü	U	U	U
1,1,1-Trichloroethane	2.0	Ü	ີ ບ	U	บ	U	υ	U	U	U
Benzene	2.0	2.8	0.79	0.25	U	U	U	Ü	U	U
Carbon Tetrachloride	2.0	U	U	Ü	Ū	Ū	Ü	U	Ü	U
1,2-Dichloropropane	2.0	U	υ	U	บ	Ü	Ū	υ	Ū	U
Bromodichloromethane	2.0	U	Ū	U	· U	U	Ū	U	U	Ū
Trichloroethene	2.0	Ų	U	Ų	U	U	Ü	υ	U	U
1,4-Dioxane	2.0	U	U	U	Ü	U	U	U	U	Ų
2,2,4-Trimethylpentane (Isooctane)	2.0	บ	U	U	U	U	U	υ	U	U
n-Heptane	2.0	U	U	U	U	U	บ	U	U	U
4-Methyl-2-pentanone	2.0	บ	U	U	U	U	U	U.	U	U
1,1,2-Trichloroethane Toluene	2.0	U 3.3	U 0.94	U 0.25	ับ	U	U	U	U	U
2-Hexanone	2.0	U	U.54	U.25	Ü	Ü	U	Ů	U	ט
Dibromochloromethane.	2.0	υ	U	บ	U	U	U	Ü	U	U
1.2-Dibromoethane	2.0	Ü	Ü	Ū	U	U	Ū	บ	U	U
n-Octane	2.0	U	U	Ù	Ū	U	U	U	Ü	Ü
Tetrachloroethene	2.0	υ	U	Ų	U .	Ü	U	U	U	U
Chlorobenzene	2.0	U	บ	U	U	U	U	U	บั	U
Ethylbenzene	2.0	U	'n	U	Ū	Ü	Ü	Ŭ.	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	υ	U	บ
Bromoform	2.0	U	U	U	υ	Ü	U	U	U	U
Styrene	2.0	Ü	ט	U	U	U.	U.	Ü	U	U
o-Xylene n-Nonane	2.0	บ	บ	U	บ	U U	U	Ü	U U	U
1,1,2,2-Tetrachloroethane	2.0	U	ש	U	U	U	Ü	ับ	U	U
Cumene	2.0	บ	U	Ü	U	Ü	U,	U	U	U
n-Propylbenzene	2.0	. U.	U	Ü	บ	Ü	U.	บ	Ū	U
3-Ethyltoluene	2.0	Ü	U	U	Ü	Ū	Ü	Ü	U	U
4-Ethyltoluene	2.0	U	Ü	U	U	U	Ų	บ	Ū	Ū
1,3,5-Trimethylbenzene	2.0	U	U	U	บ	U	U	Ű	Ū	U
2-Ethyltoluene	2.0	U	U	U	Ü	U	Ū	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	Ü	U	Ú	UΙ	U,	U
n-Decane	2.0	8.6	2.4	0.42	U	U	U	Ü	U	U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	2.0	U	Ų	U	U	U	U	U	U	Ü
1,4-Dichlorobenzene 4-Isopropyltoluene (p-Cymene)	2.0	U	U U	U	U	U	U	Ũ	U	U
4-Isopropynomene (p-Cymene) 1,2,3-Trimethylbenzene	2.0	Ü	U	Ü	บ	U	U	U	U	υ
1,2-Dichlorobenzene	2.0	Ü	U	U	Ü	U	U	U	U	ับ
1,2,4-Trichlorobenzene	2.0	Ü	Ü	Ü	U	บ	Ü	บ	บ	U
Naphthalene	2.0	Ü	U	U	U	Ü	U	υ	บ	U
a temperatification in		1	- 1	-	. ~ 1					

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ng/m3: ng/tube/sample volume in liter-ng/L-ug/m3.

ug/m3 to ppby: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Sample ID:		AA-	009-03301	2-001	AA-	010-03301	2-001	I AA-	018-03301	2-001
Date: State Control	e de la casa de la cas La casa de la casa de		3/30/2012			3/30/2012			3/30/2012	
Sample Volume (liters)			3.9 Liter			4.03 Lite	r	<u> </u>	4.0 Liter	
Matrix:			Air	,		Air			Air	
	ng/Tube	ng/Tube	adam,	PPB(v/v)	ne/Tube	ug/m²	PPB(9/V)	ng/Tube	ug/m	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	2.0	0.52	0.10	Ü	U	U	2.1	0.52	0.10
1,2-Dichloro-1,1,2,2-										
tetrafhioroethane (CFC 114)	2.0	Ū	U	U	U	Ų	U	U	Ŭ	U
Vinyl Chloride	2.0	U.	U	U '	U	U	U	U	ָ <u></u> ע	U
1,3-Butadiene	2.0	υ	Ü	บ	U	U	U	υ	U	U
Chloroethane	2.0	υ	U	U	U	U	U	U	υ	U
Acetone	10	11	2.9	1.2	U	U	U	Ŭ.	U	·U
Trichlorofluoromethane	2.0	υ	U	U	U	υ	Ü	Ü	U	U
1,1-Dichloroethene	2.0	บ	U	บ	U	U	U	Ü	U	Ü
Methylene Chloride	5.0	U	U	Ü	ับ	ับ	Ü	Ü	Ū	U
Trichlorotrifluoroethane	2.0	U,	U	Ū	U.	Ü	U	U	Ù	U
trans-1,2-Dichloroethene	2.0	ับ	U	U	U	Ü	U	Ų	U	U
1,1-Dichloroethane	5.0	Ü	ÜĴ	យ	UJ	UJ	UJ	UJ	c W	UJ
2-Butanone (MEK)	2.0	U	บ	U	U	U	U	Ü	Ü	U
cis-1,2-Dichloroethene	2.0	14	3.6	0.92	Ŭ	U	Ŭ	3.1	0.79	0.20
n-Hexane	2.0	U	U	Ü	U	Ŭ	Ü	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	Ų
1,2-Dichloroethane	2.0	U	บ	U	U	U	Ü	U	U	U
1,1,1-Trichloroethane	2.0	U	Ŭ	U	Ú	Ü	U	U	υ	U
Benzene	2.0	U	U	Ų	U	U	U	Ü	Ü	U
Carbon Tetrachloride	2.0	U	Ü	U	Ü	Ü	U	U	U.	U
1,2-Dichloropropane	2.0	U	ט	Ü	ับ	Ü	Ū	Ū	U	U
Bromodichloromethane	2.0	U	Ü	U	Ü	U	U	U	U	U
Trichloroethene	2.0	4.8	1.2	0.23	U ′	U.	U.	2.0	0.50	0,094
1,4-Dioxane	2.0	ָט	U	Ü	U	Ü	U.	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U,	Ŭ	Ü	U	U	Ü	U
n-Heptane	2.0	U	U	U	ñ	Ü	Ü	Ü	Ü	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	Ū	U	Ų
1,1,2-Trichloroethane	2.0	U	Ü	U	U	U	U	U	Ü	U
Toluene	2.0	3.4	0.88	0.23	U-	บ	U	Ų	U	U
2-Hexanone	2.0	Ų	Ü	Ü	Ū	U	U	U .	Ü	U
Dibromochloromethane	2.0	ប	ט	Ü	U	Ü	U	Ü	Ü	U
1,2-Dibromoethane	2.0	U	Ū	U	U	Ü	U	Ų	Ų	U
n-Octane	2.0	U	Ü	U	U	U	U	U	U	Ų
Tetrachloroethene	2.0	U	U	U	U	U	U	υ	U	U
Chlorobenzene	2.0	4.3	1.1	0.24	Ü	U	U	U	U	U
Ethylbenzene	2.0	Ų	ָׁט ע	Ü	U	U	Ŭ	Ü	U	U
m,p-Xylenes	4.0	4.5	1,1	0.26	Ū.	ับ	ľ	U	U	U
Bromoform	2.0	U	ב	U	U	Ü	U	Ŭ	Ü	U
Styrene	2.0	บ	U	Ü	U	U	U	Ü	U	U
o-Xylene	2.0	2.8	0.73	0.17	U	· U	υ	·U	U	U
n-Nonane	2.0	2.5	0.64	0.12	บ	Ü	U	U	U	Ų
1,1,2,2-Tetrachloroethane	2.0	U	U	Ų	Ü	U	U	U	U	·U
Cumene	2.0	บ	Ų	U	U	U	υ	Ū	U	υ
n-Propylbenzene	2.0	4.7	1.2	0.25	U	U	U	Ū	U	U
3-Ethyltoluene	2.0	15	3.9	8.79	U i	U	U	3.8	0.95	0.19
4-Ethyltoluene	2.0	7.1	1.8	0.37	U	υ	U	U	U	U
1,3,5-Trimethylbenzene	2.0	11	2.8	0.56	บ	U	U	2.7	0.68	0.14
2-Ethyltoluene	2.0	6.8	1.7	0.35	υ	U	ŭ	Ü	Ü	- U
1,2,4-Trimethylbenzene	2.0	´ 36	9.2	1.9	Ų	U	U	9.0	2.2	0.46
n-Decane	2.0	8.8	2.2	0.39	U	U	U	Ü	U	U
1,3-Dichlorobenzene	2.0	Ü	υ	U	υ	U	Ū	Ü	U	υ
1,4-Dichlorobenzene	2.0	2.1	0.55	0.091	Ü	U	Ü	U	U.	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	Ü	U	U	ΰ	U	U
1,2,3-Trimethylbenzene	2.0	9.0	2.3	0.47	U	U	≠ U	2.1	0.52	0.11
1,2-Dichlorobenzene	2.0	9.6	2.5	0.41	ָט	U	Ū	ΰ	U	Ü
1,2,4-Trichlorobenzene	2.0	Ü	U	υ	U	U	U	U	Ü	ľυ
	2.0	Ü	U U	บ	U U	บ	Ü	Ü	ับ	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv; conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Sample ID:		FE	3-033012-0	01	AA-(011-04031	2-001	AA-i	017-04031	2-001
Date: ***			3/30/2012			4/3/2012			4/3/2012	
Sample Volume (litera)			NA			4.56 Liter			4.16 Liter	
Marrie 1995			Air			Air			Air	
Voletiles	a ng/Tube	rag/Tube	ngmi .	PPB(v/v)	ng/Tobe	ug/m	PPB(v/v)	me/Tube	mym"	PIPE(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	ប	U	U	5.3	1.2	0.24	U	ប	U
1,2-Dichloro-1,1,2,2-							•			
tetraffuoroethane (CFC 114)	2.0	U	Ü	Ü	ט	ับ	Ü.	U	Ü	Ú
Vinyl Chloride	2.0	U	`_U	U	3.0	0.65	0.26	ט	ับ	U
1,3-Butadiene	2.0	Ū	U	U	U	U	U	Ü	Ų	Ü
Chloroethane	2.0	ŭ	ប	ั้น	Ü	U	U	Ü	Ų	U
Acetone	10	U	U	Ü	U	U	U	U	Ų	U
Trichlorofluoromethane	2.0	U	U	U	Ü	U	Ü	Ü	U	U
1,1-Dichloroethene	2.0	U	ប	บ	U	บ	υ	. บ	U	Ü
Methylene Chloride	5.0	U	U	U	Ü	U	บั	Ü	υ	U
Trichlorotrifluoroethane	2.0	υ	U	ט	Ü/	Ú	Ų	Ü	U	Ü
trans-1,2-Dichloroethene	2.0	U	U	ָט	Ü	Ü	U	Ŭ	Ü	Ü
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	Ü1	ບັນ	ŲJ	ຫຼ
2-Butanone (MEK)	2.0	U	Ü	ย	U	บ	U	U	U	บ
cis-1,2-Dichloroethene	2.0	U	U	U	17	3.6	0.92	3.1	0.75	0.19
n-Hexane	2.0	U	บ	U	U	U	U	U	Ü	Ü
Chloroform	2.0	U	U	U	Ü	U	Ü	U	Ų	Ü
1,2-Dichloroethane	2.0	Ü	Ų	U	U	U	ับ	U	ŭ	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	Ū	U	Ü
Benzene	2.0	U	U	U	Ū	U	Ŭ	Ü	U	U
Carbon Tetrachloride	2.0	Ü	U	U	U	U	Ü	U	U	U
1,2-Dichloropropane	2.0	บ	U	U	Ū	υ	บ	U	Ü	U
Bromodichloromethane	2.0	U	U	υ	ΰ	U	U	Ü	U	U
Trichloroethene	2.0	ũ	ŭ	Ü	3.0	0.66	0.12	Ų	U	Ü
1,4-Dioxane	2.0	U	U	U	บ	U	U	U	ับ	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	ָּט	บ	Ü	U	U	Ü	Ü	U
n-Heptane	2.0	Ü	U	U	U	U	U	U	U	ប
4-Methyl-2-pentanone	2.0	U	U	Ü	U	U	υ	U	Ü	U
1,1,2-Trichloroethane	2.0	U	Ū	Ü	U	Ū	U	บ	Ŭ	U
Toluene	2.0	U	U	U	2.7	0.60	0.16	U	U	U
2-Hexanone	2.0	U	U	U	Ü	U	Ų	U	U	U
Dibromochloromethane	2.0	U	U	U	U	Ü	U	บ	U	υ
1,2-Dibromoethane	2.0	. U	Ü	U	. ถ	U	U	υ	U	U
n-Octane	2.0	Ŭ	Ų	ับ	U	U	Ü	Ü	U.	U
Tetrachloroethene	2.0	U	Ų	U	Ü	U	U	_ ບ	U	U
Chlorobenzene	2.0	Ü	U	U	4.6	1.0	0.22	U	U	U
Ethylbenzene	2.0	Ü	υ	บ	U	U	U	U	U	Ų
m,p-Xylenes	4.0	Ü	U	U	U	U	U	U	U	υ·
Bromoform	2.0	Ü	Ü	U .	Ü	Ü	Ü	Ü	U	U
Styrene	2.0	Ü	U	U	U	U	U.	Ü	U	U
o-Xylene	2.0	U	U	U	11	2.4	0.55	U	บ	U
n-Nonane	2.0	Ü	ŭ	Ū	2.2	0.48	0.092	U	U	U
1,1,2,2-Tetrachloroethane	2.0	Ü	U	U	Ų	Ü	Ų	Ü	U	U
Cumene	2.0	U	U	U	7.6	1.7	0.34	U	U	U
n-Propylbenzene	2.0	U	Ũ	Ŭ	19	4.2	0.85	2.5	0.61	0.12
3-Ethyltoluene	2.0	. ប	U	Ü	47	10	2.1	6.1	1.5	0.30
4-Ethyltoluene	2.0	U	บ	U	19	4.3	0.87	2.6	0.62	0.13
1,3,5-Trimethylbenzene	2.0	U	U	U	24	5.2	1.1	3.2	0.76	0.16
2-Ethyltoluene	2.0	Ü	U	Ü	19	4.1	0.84	2.4	0.59	0.12
1,2,4-Trimethylbenzene	2.0	Ü	U	U	86	19	3.8	11	2.7	0.55
n-Decane	2.0	Ü	U	Ü	7.7	1.7	0.29	Ü	U	U
1,3-Dichlorobenzene	2.0	U	Ų	U	U.	U	U	U	U	ับ
1,4-Dichlorobenzene	2.0	U	· U	U	3.2	0.69	0.12	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	Ü	Ü	U	U	U	Ü	U	U	Ū
1,2,3-Trimethylbenzene	2.0	Ü	U	U	21	4.6	0.94	2.7	0.64	0.13
1,2-Dichlorobenzene	2.0	U	U	บ	16	3.5	0.59	Ü	Û	บ
1,2,4-Trichlorobenzene	2.0	U	U	υ	U	U	U	Ü	U	U
Naphthalene	2.0	U	U	T U	U.	U	U	Ü	U	υ
Naphthalene	2.0		Ū	Ū					, ,	_

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ng/m3; ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppby: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

				T						
Semple ID:	Charter :	AA-	017-04031	2-002	AA-	018-04031	2-001	AA-	019-04031	2-001
Date:			4/3/2012		ļ	4/3/2012		A.	4/3/2012	
Sample Volume (liters) Manus:			4.25 Liter			3.77 Liter			4.2 Liter	
Marris: Volatiles			Air	Same and		Air	tone/ /	_	Air	PPB(wv)
		U U	ugan U	PPB(v/v)	ng/10bc	ugma [*]	PPB(y/v) 'U	ng/lube	0,83	0.17
Dichlorodifluoromethane (CFC 12) 1,2-Dichloro-1,1,2,2-	2.0		<u>'</u>	Ų		, <u>v</u>	ļ.,	3,3	0.03	0.17
tetrafluoroethane (CFC 114)	2.0	ับ	บ	ប	ָט	ַעַ	U	. บ	Ų	U
Vinyl Chloride	2.0	U	U	U	Ü	Ü	U	2.9	0.70	0.27
1,3-Butadiene	2.0	U	U	U	Ü	U	U	Ų	Ū	U
Chloroethane	2.0	Ü	U	Ŭ	Ü	U	U	U	Ū	U
Acetone	10	Ü	Ü	U	10	2.7	1,1	15	3.7	1.5
Trichlorofluoromethane	2.0	U	U	U	U	U	Ü	U	U	Ü
1,1-Dichloroethene	2.0	Ü	Ü	Ŭ	Ü	U	U	U	U	U
Methylene Chloride	5.0	ט	U	Ų	Ŭ	U	Ü	ับ	Ų	U
Trichlorotrifluoroethane	2.0	ב	U	U	Ų	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	บ	Ù	U	U .	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	ພ	ÜJ	ບເ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	Ŭ	U	U	Ü	U	U	U	U	Ü
cis-1,2-Dichloroethene	2.0	Ü	U	Ü	Ŭ	Ų	U	34	8.0	2.0
n-Hexane	2.0	U	U	U	Ü	Ü	ַט	U	Ü	U
Chloroform	2.0	U	Ü	Ü	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	Ü	U	บ	U.	U	U
1,1,1-Trichloroethane	2.0	U	U	U	Ü	Ŭ	U	U	Ü	U
Benzene Control Torrolloida	2.0	U	U	U	U	U	U	U	U	Ü
Carbon Tetrachloride	2.0	บ	U	U	U	Ų	U	Ų	U	U
1,2-Dichloropropane	2.0	ט	Ü	U	Ü	U	Ü	U	U	U
Bromodichloromethane Trichloroethene	2.0	. "	מ	U	U	U	U	4.0	0.96	U 0.18
1.4-Dioxane	2.0	U	ט	U	ϋ	บ	ับ	4.0 / U	U.96	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	<u>"</u>	U U	U	Ü	U	U	บ
n-Heptane	2.0	Ü	Ü	U	U	U	. U	- U	U.	U U
4-Methyl-2-pentanone	2.0	U	Ü	Ü	U	Ü	U	Ü	U	U
1,1,2-Trichloroethane	2.0	Ü	U	U	U	Ü	Ü	U	U	บ
Toluene	2.0	υ·	Ü	U	บ	U	U	9.3	2.2	0.59
2-Hexanone	2.0	U	U	U	Ü	U	Ü	U	Ü	U
Dibromochloromethane	2.0	U	U	U	Ū	Ü.	U	บ	Ü	Ü
1,2-Dibromoethane	2.0	Ū	Ü	Ū	U	U	U	U	U	ŭ
n-Octane	2.0	U	U	Ü	Ü	Ü	Ü	4.4	1.1	0.23
Tetrachloroethene	2.0	U	U	U	Ü	U	U	U	Ü	U
Chlorobenzene	2.0	Ü	U	υ	U	Ū	U	19	4.4	0.96
Ethylbenzene	2.0	U	Ŭ	Ü	U	Ü.	Ū	2.2	0.52	0.12
m.p-Xylenes	4.0	U	U	Ü	Ü	U	U	9.6	2.3	0.52
Bromoform	2.0	U	U	U	Ü.	υ	υ	ับ	U	U.
Styrene	2.0	U	Ŭ	Ŭ.	υ	U	U	U	υ	U
o-Xylene	2.0	U	U	Ü .	U	U	U	21	5.0	1,2
n-Nonane	2.0	U	U _.	U	Ü	Ü	U	15	3.5	0.67
1,1,2,2-Tetrachloroethane	2.0	U	U	บ	Ü	U	U	Ü	บ	U
Cumene -	2.0	U	U	U	Ù	כ	U	17	4.0	0.81
n-Propyibenzene	2.0	บ	Ŭ	Ü	U	U	, n	55	13	2.6
3-Ethyltoluene	2.0	2.8	0.66	0.13	· U	ט	U	160 J	39 J	7.9 J
4-Ethyltoluene	2.0	U	U	U	U	ט	U	72	17	3.5
1,3,5-Trimethylbenzene	2.0	U	U	ับ	U	U	U	96	23	4.7
2-Ethyltoluene	2.0	U	U	្ឋ	υ	U	U	71,	17	3.5
1,2,4-Trimethylbenzene	2.0	U	U	U	Ü	U	U T	370 J	89 J	18 J
n-Decane	2.0	U	U	U	U	U	U	49	12	2.0
1,3-Dichlorobenzene	2.0	U	U	U	U	Ü	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	Ü	7.3	1.7	0.29
4-Isopropyltoluene (p-Cymene)	2.0	U U	U	U	Ü	Ŭ	U	9.6	2.3	0.42
1,2,3-Trimethylbenzene	2.0	. U	U	U	U	Ü	U	87	21	4.2
1,2-Dichlorobenzene 1,2,4-Trichlorobenzene	2.0	6.3	U 15	U 0.20	U	U	Ŭ	31	7.3	1.2
	2.0	U U	1.5	0.30	U	U	U	Ü	Ü	U
Naphthalene Hersellersburgering	2.0	Ü	U	U U	U	U	U	3.1	0.73	0.14
Hexachlorobutadiene	2.0	٧	٠		υ	U	U	U	ับ	Ü

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ng/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ng/m3 to ppby: conc. m ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

							٠	AA-010-041012-002			
Sample ID:		FE	-0040312-	001	AA-	010-04101		AA-4			
Date: Sample Volume (liters)			4/3/2012 NA			4/10/2012 3.99 Liter	*- * 4		4/10/2012 3:99 Liter		
			Air		,	Air			Air		
Marrix Volatiles	ng/Tube	a. max		PPE(m)			PPE(v/v)			PPB(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	Ü	U	U	U	
1,2-Dichloro-1,1,2,2-	2.0	-	<u> </u>	-	-		<u> </u>	-	<u> </u>		
tetrafluoroethane (CFC 114)	2.0	Ŭ	Ü	ប	U	U	ប	Ū	U	ซ	
Vinyl Chloride	2.0	Ü	Ü	Ŭ	Ŭ	U	U	U	Ŭ	U	
1,3-Butadiene	2.0	U	Ū	Ü	ט	U	Ü	υ	U	U	
Chloroethane	2.0	U	U	ប	U	Ü	U	ט	U	U	
Acetone	10	U	U	U	13	3.2	1.3	21	5.4	2.3	
Trichlorofluoromethane	2.0	Ü	U	U.	Ü	U	U	U	U	Ŭ	
1,1-Dichloroethene	2.0	Ü	U	บ	Ü	Ü	U	Ü	U	U	
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	Ŭ	
Trichlorotrifluoroethane	2.0	U	U	Ū	UJ	ຼິບາ	UJ	ÜJ	ັນ	UJ	
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	. U	U	U	U	
1,1-Dichloroethane	5.0	UJ	UJ	ŲJ	υ	U	U	UJ	UJ	UJ	
2-Butanone (MEK)	2.0	U	U	U	U	U	บ	U	U	Ŭ	
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	Ü	υ	U	
n-Hexane	2.0	U	U	U	2.1	0.53	0.15	-11	2.7	0.77	
Chloroform	2.0	U	Ü	Ü	Ü	U	U	U	U	U	
1,2-Dichloroethane	2.0	U	U	Ü	Ü	U'	U	U	U	U	
1,1,1-Trichloroethane Benzene	2.0	U	n	U	Ų.	U	·U	U	U	บ	
Carbon Tetrachloride	2.0	Ü	U	ט	Ŭ	U	Ü	Ü.	U	U	
1.2-Dichloropropane	2.0	Ü	U	U	ϋ	U	U	U	บ	. U	
Bromodichloromethane	2.0	U	U	ט י	Ū	U	U	Ū	ט	U	
Trichloroethene	2.0	U	Ū	U	U	Ü	U	Ü	_U	U	
1,4-Dioxane	2.0	U	U	Ü	υ	Ū	U	U	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	Ü	Ü	Ū	U	Ü	U ·	Ü	
n-Heptane	2.0	U	U	U	Ü	U	U	Ü	· U	Ü	
4-Methyl-2-pentanone	2.0	U	Ū	U	Ü	Ü	U	Ü	Ü	U	
1,1,2-Trichloroethane	2.0	U	U	U	Ü	Ü	U	Ū.	Ü	U	
Toluene	2.0	U	Ü	U	U	Ü	U	U	Ü	Ü.	
2-Hexanone	, 2.0	Ü	U	U	U	U	U	Ū	Ū	U	
Dibromochloromethane	2.0	Ü	U	U	Û	U	U	Ü	U	U	
1,2-Dibromoethane	2.0	U	U	U	U	บ	Ü	Ü	U	U	
n-Octane	2.0	U	U	Ü	. 2.2	0.55	0.12	Ü	U	U	
Tetrachloroethene	2.0	U	U	U	Ü	U ·	U	Ü	Ü	U	
Chlorobenzene	2,0	U	U	U	Ų	Ü	U	Ū	Ū	U	
Ethylbenzene	2.0	U	U	U	U	U	U	U	บู	U	
m,p-Xylenes	4.0	U	U	U	Ü	U	U	U	Ü	IJ	
Bromoform	2.0_	υ	Ü	U)	Ü	U	U	U	Ü.	U	
Styrene	2.0	U	U	ָ ט	Ū	ŭ	U	Ŭ	Ų	U	
o-Xýlene	2.0	U	U	U	U	U	U	U	Ŭ	U	
n-Nonane	2.0	U	U	U	U	Ų	U	U	٠Ū ´	U	
1,1,2,2-Tetrachloroethane	2.0	U	Ü	U	Ü	U	U	Ū	U	U	
Cumene	2.0	U	Ü	Ü	U	U	U	U	Ü	U .	
n-Propylbenzene	2.0	Ų	ŭ	U	Ü	U	U	ט	U	U	
3-Ethyltoluene	2.0	U	. U	Ü	Ü	Ü	Ŭ	Ţ Ū	Ü	U	
4-Ethyltoluene	2.0	U	U	U	U	U	Ü	U	U	U	
1,3,5-Trimethylbenzene	2.0	U	Ü	U	U	U	U	บ	U	U	
2-Ethyltoluene	2.0	υ	U	U	Ü	U	U	U	U	U	
1,2,4-Trimethylbenzene	2.0	U	Ü	U	Ü	U	U	U	Ü	U	
n-Decane	2.0	Ü	U	U	7.3	1.8	0.31	U	U	U	
1,3-Dichlorobenzene	2.0			U	Ų	U	U	U	Ü	Ų	
1,4-Dichlorobenzene	2.0	Ü	Ü	U	, U	U	Ų	U	U	U "	
4-Isopropyltoluene (p-Cymene)	2.0	U	U U	U	U	. U	Ü	U	U	U	
1,2,3-Trimethylbenzene	2.0	<u> </u>		U	Ü	U	U	Ú	U	U	
1,2-Dichlorobenzene	2.0		Ü	U	U	Ü	U	Ü	U	Ü	
1,2,4-Trichlorobenzene	2.0	Ü	U	U	Ü	U	U	U	Ü	ני	
Naphthalene	2.0	ָ ט ַ	U	U	U	·U	Ŭ.	U	Ü	U	
Hexachlorobutadiene	2.0		0	U	Ü	U	Ū	Ü	ับ	Ū	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter-ng/L-ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

								AA-018-041012-001			
Sample ID:		AA-I	017-04101		AA-	017-04101		AA-			
Date:			4/10/2012			4/10/2012			4/10/2012	·	
Sample Volume (Iners)			4.32 Liter	<u> </u>	ļ	4.32 Lite	<u> </u>	├	4.36 Lite	·	
Matrix:			Air		Samuel Control	Air	N-1-1-0-1-1-1-1	200000000000000000000000000000000000000	Air		
Volatiles		ne/Tube U	*****************	***************************************	***************************************	220000000000000000000000000000000000000	PPB(v/v)	International News	*************		
Dichlorodifluoromethane (CFC 12) 1,2-Dichloro-1,1,2,2-	2.0	<u> </u>	Ü	U	U	·U	U	2.1	0.47	0.095	
tetrafluoroethane (CFC 114)	2.0	Ü	U	U	υ	บ	υ	Ü	U	υ·	
Vinyl Chloride	2.0	U	U	U	บ	Ŭ	U	U	U	Ü	
1,3-Butadiene	2.0	Ü	U	, ñ	Ų	U,	υ	Ü	U	U	
Chloroethane	2.0	ט	U	U	U	U	υ、	U	Ü	Ū	
Acetone	10	18	4.2	1.8	U	U	U	13	2.9	1.2	
Trichlorofluoromethane	2.0	Ü	U	U	U	U	Ū	U	υ	Ų	
1,1-Dichloroethene	2.0	U	บ	U	U	U.	U,	บ	U	U	
Methylene Chloride	5.0	ט	U	U	Ü	Ü	U	U	U	U	
Trichlorotrifluoroethane	2.0	Ü	บั	Ωĵ	IJ	ເນ	UJ	ÜJ	UJ	UJ	
trans-1,2-Dichloroethene	2.0	U	ט	U	Ü	Ü	U	U	U	Ŭ	
1,1-Dichloroethane	5.0	IJ	UJ	UJ	บ	Ü	Ü	U	U	U	
2-Butanone (MEK)	2.0	Ü	U	U	U	U	U	ָט	U	U	
cis-1,2-Dichloroethene	2.0	U	U	U.	Ü	U	. บ	30	6.8	1.7	
n-Hexane	2.0	2.2	0.52	0.15	U	U	Ŭ	3.3	0.76	0.21	
Chloroform	2.0	Ü	U	U	Ü	U	U	ับ	U	U	
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	Ũ	Ų	
1,1,1-Trichloroethane	2.0	U	U	U	U	Ū	U	U	Ü	Ü	
Benzene	2.0	Ü	U	U	U	U	U	U	U	U	
Carbon Tetrachloride	2.0	U	U	υ	Ü	Ü	U	U	Ü	U	
1,2-Dichloropropane	2.0	U	Ŭ	U	ับ	U	U	บ	U	U	
Bromodichloromethane	2.0	U	U	U	Ü	U	U	U	U	U	
Trichloroethene	2.0	U	บ	บ	2.3	0.53 U	0.098 U	17	3.9	0.72	
1,4-Dioxane	2.0	บ	U	Ü	U	U	U	U	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	Ü	U	U U	Ü	U	ט	U U	U	
n-Heptane 4-Methyl-2-pentanone	2.0 2.0	U	บ	U	U	υ	U	Ü	Ü	U	
1,1,2-Trichloroethane	2.0	Ü	Ü	U	Û	บ	U	Ü	Ü	U	
Toluene	2.0	2.0	0.47	0.12	U	U	U	5.1	1.2	0.31	
2-Hexanone	2.0	U	U	U	U	Ū	U	U	U	U	
Dibromochloromethane	2.0	U	U	Ü	บ	U	U	Ü	U	U	
1,2-Dibromoethane	2.0	U	U	· U	Ü.	U	Ü	U	U	Ü	
n-Octane	2.0	4.1	0.95	0.20	U U	U	Ü	3.0	9.69	0.15	
Tetrachloroethene	2.0	Ü	U	U	Ū	U	Ü	U	U	U	
Chlorobenzene	2.0	บ	U	บ	U	U	U	9,2	2.1	0.46	
Ethylbenzene	2.0	Ù	Ú	U	U	U	U	Ü	Ü	U	
m,p-Xylenes	4.0	Ü	U	υ	Ù	U	U	U	U	U	
Bromoform	2.0	U	U	U	U.	U	υ	Ü	Ü	υ	
Styrene	2.0	Ü	U	U	Ü	Ų	Ü	Ú	U	υ	
o-Xylene	2.0	U	U	U	U	Ü	U U	ŭ	U	Ü	
n-Nonane	2.0	U	U _C	U	Ü	Ų.	U	U	U	U	
1,1,2,2-Tetrachloroethane	2.0	Ü	U	Ü	U	U	U	U	U	U	
Cumene	2.0	Ũ	U	U	U	U	U	U	U	U	
n-Propylbenzene	2.0	U	U T	U	Ų	Ŭ	U	U	Ü	U	
3-Ethyltoluene	2.0	U	U	ŭ	U,	Ü	ับ	4.4	1.0	0.21	
4-Ethyltoluene	2.0	U	U.	U	U	U	Ū	2.3	0.52	0.11	
1,3,5-Trimethylbenzene	2.0	U	บ	บ	U	U	U	3.2	0.72	0.15	
2-Ethyltoluene	2.0	U	U	U	ΰ	U	Ü	2.3	0.52	0.11	
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	Ü	11	2.4	0.49	
n-Decane	2.0	12	2.7	0.46	Ü	U	ַָּט	8.0	1.8	0.31	
1,3-Dichlorobenzene	2.0	U	U.	U	Ü	U	Ü	Ü	Ū	U	
1,4-Dichlorobenzene	2.0	U	U	U	U	U.	Ü	4.5	1.0	0.17	
4-Isopropyltoluene (p-Cymene)	2.0	U	U	Ü	Ū	U	U	Ū	Ü	U	
1,2,3-Trimethylbenzene	2.0	Ü	U	U	Ü	U	U	3.4	0.77	0.16	
1,2-Dichlorobenzene	2.0	U	U	U	U.	υ	Ü	19	4:3	0.71	
1,2,4-Trichlorobenzene	2.0	U.	U	Ü	Ü	U	Ü	υ	Ü	U	
	2.0	U	บไ	U	Ü	ับ	U	U	Ü	U	
Naphthalene Hexachlorobutadiene	2.0	U	Ü	Ü	Ü	U	Ü	Ū	U	Ü	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ng/m3.

ug/m3 to ppbv: cone. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

		· · · · · · · · · · · · · · · · · · ·	ED 04101	2:001	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	010-04111	2.001	AA-011-041112-001			
Sample ID: Date:		AA-	FB-041012 4/10/2012	1.174	AA-	4/11/2012		AA-	4/11/2012		
Sample Volume (Iriers)			NA			3.96 Liter		· · · · · ·	4.22 Liter		
Marita (1871)			Air			Air	-	1	Air		
Volatiles	ng/Tube	ng/Tube	- ug/m²	PPB(v/v)	ng/Tube	ugim	PPR(v/v)	ng/Tube	ong/m	PPB(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	U	U	υ	U	U	U	6.0	1.4	0.29	
1,2-Dichloro-1,1,2,2-											
tetrafluoroethane (CFC 114)	2.0	ט	U	U	. บ	Ü	Ü	Ü	U U	U	
Vinyl Chloride	2.0	U	U	U	Ü	Ü	บ	U	บ	U	
1,3-Butadiene Chloroethane	2.0	บ	υ	U	υ.	<u>י</u>	บ	ט	Ū	U	
Acetone	2.0 10	U	บ	U	23	5.7	2.4	13	3.2	1.3	
Trichlorofluoromethane	2.0	U	Ü	U	U	U	U	2.7	0.65	0.12	
1,1-Dichloroethene	2.0	Ū	Ū	U	U	U	U	U	U	U	
Methylene Chloride	5.0	Ū	Ū,	U	Ü	U	U	9.0	2.1	0.61	
Trichlorotrifluoroethane	2.0	UJ	UJ	UJ	UJ	IJ	UJ	UJ	UJ	UJ	
trans-1,2-Dichloroethene	2.0	υ	Ū	υ	Ü	Ü	U	U	U	υ	
1,1-Dichloroethane	5.0	U	U	U	U	U	U.	8.3	2.0	6.49	
2-Butanone (MEK)	2.0	Ų	U	υ	Ü	U	U	2.1 J	0.50 J	0.17 J	
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	220 J	53 J	13 J	
n-Hexane	2.0	U.	Ü	Ü	3.1	0.77	0.22	3.0	0.72	6.20	
Chloroform	2.0	υ	Ü	U	U	U	U	4.9	1.2	0.24	
1,2-Dichloroethane	2.0	U	U	U	Ü	U	U	U	U	U	
1,1,1-Trichloroethane	2.0	Ų	U	U	Ü	U	υ	U	U	U	
Benzene	2.0	U	Ü	υ	U	υ	υ	U ⁻	U	U	
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane	2.0	U	U	U	Ü	U	U	Ü	U	. U	
Bromodichloromethane Trichloroethene	2.0	U	U	U	U U	U	U	180 J	43 J	8.0 J	
1.4-Dioxane	2.0	U	U	Ü	Ü	U	U	U	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	Ü	U	U	U	U	U	U	
n-Heptane	2.0	υ	U	Ü	υ	Ü	U	U	Ü	U	
4-Methyl-2-pentanone	2.0	υ	Ü	Ü	Ü	Ü	Ü	υ	U	Ü	
1,1,2-Trichloroethane	2.0	ı Ü	Ü	Ü	Ü	υ	Ü	U	U	U	
Toluene	2.0	Ų	U	U	. U	U	U	31	7.3	1.9	
2-Hexanone	2.0	U	Ü	U	Ū	υ	ับ	U	U	U	
Dibromochloromethane	2.0	U	U	U	υ	U	U	U	U	U	
1,2-Dibromoethane	2.0	U	Ü	Ü	Ü	U	·U	Ü	U	U	
n-Octane	2.0	U	U	U	U	U	U	U	U	U	
Tetrachloroethene	2.0	Ü	υ	U	Ü	U	U	·U	U	U	
Chlorobenzene	2.0	υ	U	Ų	U	U	U	49	12	2.5	
Ethylbenzene	2.0	Ü. "	U	U	Ü	U	υ	U	U	ŭ	
m,p-Xylenes	4.0	U	U	U	U.	U	U	U	U	υ	
Bromoform	2.0	. U	U	U	υ	U .	Ų	U	U	U	
Styrene o-Xylene	2.0	U	U	U	U	U /	Ü	2.1	U .	0.11	
n-Nonane	2.0	U	U	U	Ü	U	U	3.2	0.49	0.11	
1,1,2,2-Tetrachloroethane	2.0	U	U	U	Ü	U	U	U	U	U	
Cumene	2.0	บ	U	Ü	Ü	U	U	Ü	Ü	U	
n-Propylbenzene	2.0	U	U	U	U	U	Ū	2.3	0.54	0.11	
3-Ethyltoluene	2.0	U	U	υ	U	U	U	6.1	1.4	0.29	
4-Ethyltoluene	2.0	U	U	U	Ü	U	U	2.9	0.70	0.14	
1,3,5-Trimethylbenzene	2.0	Ū	Ų	Ü	Ū	Ü	U	4.3	1.0	0.21	
2-Éthyltoluene	2.0	U	U	U	U	U	U	2.8	0.66	0.13	
1,2,4-Trimethylbenzene	2.0	Ü	U	U	U	U	Ü	14	3.4	0.68	
n-Decane	2.0	U	U	U	2.9	0.73	0.12	17	3.9	0.67	
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	Ü	U	Ü	
1,4-Dichlorobenzene	2.0	U	U	U	U	Ü	U	40	9.5	1.6	
4-Isopropyltohiene (p-Cymene)	2.0	บ	U	U	U	U	U	2.1	0.49	0.090	
1,2,3-Trimethylbenzene	2.0	Ü	U	U	. U	U.	U	4.6 170 J	1.1	0.22	
1,2,4-Trichiorobenzene	2.0	Ü	U	U	U	Ü	U		40 J	6.7 J	
Naphthalene	2.0	U	U	U	U	Ŭ.	U	U	U	บ	
Hexachlorobutadiene	2.0	υ	U	U	Ŭ U	Ü	U	บ	U	Ü	
**************************************	2.0	<u> </u>			U				ب	I	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample

volume, molecular weight of compound and factor 24.46 (related to the gas constant). ng/L to ng/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppby: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Sample ID			012-04111	2-001		020-04111	2-001	F	3-041112-0	001
Date:			4/11/2012			4/11/2012			4/11/2012	
Sample Volume (liters)			4.15 Liter			4.08 Lites			NA	
Marrix			Air			Air	•		Air	
Volatiles	ng/Tube			PPB(9/9)	enterette.		PPB(v/v)	wo/Title	ug/m	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	U	U	U .
1.2-Dichloro-1.1.2.2-	2.0	l –	<u> </u>	-	١	ا	Ť	١Ť	۱Ť	l -
tetrafluoroethane (CFC 114)	2.0	U	บ	, บ	ับ	U	บ	U	บ	ប
Vinyl Chloride	2.0	U	U	U	U	Ü	U	U	U	U
1,3-Butadiene	2.0	υ	U	· U	U	U	U,	υ	υ	U
Chloroethane	2.0	Ŭ.	Ü	U	Ü	Ü	Ü	Ü	Ū	U
Acetone	. 10	17	4.2	1.8	Ü	Ų	U	U	Ų	U
Trichlorofluoromethane	2.0	Ü	U	U	υ	Ü	U	Ü	Ü	U
1,1-Dichloroethene	2.0	U	U	υ	Ü	U	U	υ	υ	Ü
Methylene Chloride	5.0	U	U	U	U	U	U	υ	U	Ü
Trichlorotrifluoroethane	2.0	Ü	UJ	UJ	UJ	UJ	UJ	ÜJ	Ü	ÜJ
trans-1,2-Dichloroethene	2.0	Ū	U	บ	Ü	U	U	U	U	U
1,1-Dichloroethane	5.0	U	U	U	Ü	U	יט	ָּט	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U	υ	U	υ
cis-1,2-Dichloroethene	2.0	2.5	0.60	0.15	U	U.	U	U	U	Ü
n-Hexane	2:0	U	U	Ü	U	U	Ū	U	U	U
Chloroform	2.0	U	U	U	U	U ·	Ü	Ü	U	U
1,2-Dichloroethane	2.0	Ü	υ	U	Ú	U	U	υ	Ü	U
1,1,1-Trichloroethane	2.0	ับ	Ų	U	Ü	Ü	Ü	U	Ū	υ
Benzene	2.0	U	Ü	U	U	U	U	- U	U	υ
Carbon Tetrachloride	2.0	U	U	Ü	U	U	U	U	υ	Ü
1,2-Dichloropropane	2.0	U	U	Ü	Ü	Ü	Ü	Ü	U	Ū
Bromodichloromethane	2.0	U	Ü	Ü	Ü	U	U ·	Ü	U	Ü
Trichloroethene	2.0	3.3	0.79	0.15	Ū	U	Ü	Ū	Ü	Ü
1,4-Dioxane	2.0	U	U	U	Ü	U	Ü	Ü	Ü	Ü
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	Ü	U	U	U	Ū	Ü	Ū
n-Heptane /	2.0	U	Ū	U	Ü	U	U	U	Ü	U
4-Methyl-2-pentanone	2.0	Ü	Ü	U	U	Ü	Ü	U	U	Ü
1,1,2-Trichloroethane	2.0	U	Ü	U	Ü	U	Ü	Ü	U	U
Toluene	2.0	2.8	0.67	0.18	Ü	Ü	U	Ü	Ü	U
2-Hexanone	2.0	U	U	U	Ū	Ü	U	Ū	U	U
Dibromochloromethane	2.0	Ü	U	U	U	U	Ü	Ū	U	Ū
1,2-Dibromoethane	2.0	U	Ü	U	Ü	ΰ	Ü	U	U	Ū
n-Octane	2.0	U	Ü	U	Ü	U	U	Ü	U	U
Tetrachloroethene	2.0	Ü	Ü	U	Ü	Ü	U	Ü	Ü	U
Chlorobenzene	2.0	U	Ü	Ū	Ŭ	Ū.	U	Ü	U	Ü
Ethylbenzene	2.0	Ü	Ü	U	U	U	U	U	U	Ū
m,p-Xylenes	4.0	Ü	Ü	U	Ü	U	U	U	U	U
Bromoform	2.0	Ü	Ü	Ü	Ü	U	U	บ	υ	·Ū
Styrene	2.0	Ü	บ	· U	Ü	U	U	บ	u	Ū
o-Xylene	2.0	U	Ü	U	Ü	U	U	Ū	U	U
n-Nonane	2.0	U	Ü	Ü	Ü	U	U	U	U	Ū.
1.1.2.2-Tetrachioroethane	2.0	Ü	Ü	Ü.	U	Ü	U	U	ับ	บ
Cumene	2.0	Ü	U	Ü	U	Ü	U	U	U	U
n-Propylbenzene	2.0	Ü	U	Ü	U	U	·U	U ·	U	U
3-Ethyltoluene	2.0	U	U	U	ΰ	U	U	U	Ü	U
4-Ethyltoluene	2.0	Ü	U	Ü	บ	U	· U	U	U	Ü
1,3,5-Trimethylbenzene	2.0	Ü	Ū	Ū	Ū	U	U	U	U	U
2-Ethyltoluene	2.0	Ü	บ	U	U.	U	Ü	U	บ	· U
1,2,4-Trimethylbenzene	2.0	Ū	Ū	Ü	U	Ü	U	U	บ	U
n-Decane	2.0	9.7	2.3	0.40	Ü	U	Ü	บ	U`.	U
1,3-Dichlorobenzene	2.0	U	U	U	Ü	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	บ	Ü	U	U	U	Ü	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	บ	U	Ü	u	U	υ	Ü
1,2,3-Trimethylbenzene	2.0	บ	Ü	Ü	Ŭ	.U	U	U	Ü	U -
1,2-Dichlorobenzene	2.0	4.8	1.2	0.19	ŭ	U	U	ับ	U	U.U
1,2,4-Trichlorobenzene		U	Ü	U		U				
Naphthalene	2.0	U	U	บ	U		U	U	U	U_
	2.0	U	ט	ט	Ü	U.	U.	U	U	,U
Hexachlorobutadiene	2.0		ب	U	บ	L U	U	Ü	Ü	\ U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ng/m3; ng/tube/sample volume in liter-ng/L=ug/m3.

ng/m3 to ppbv; conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Sample ID:		A A .	000-04121	2 001		011-04121	2-001	ΔΔ.	017-04121	2.001
Date:		303-	4/12/2012		202	4/12/2012		300-	4/12/2012	
Sample Volume (liters)		4.26 Liter				2.44 Liter		-	2.96 Liter	
Matrix:			Air			Air			Air	
Votatiles	ng/Tube	ng/Tube	ug/m	PPB(v/v)	ng/Tubo	ug/m³	PPB(v/v)	ng/Tubo	Djg/80	PPE(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	Ū	Ū	Ū	U	U	U	3.9	1.3	0.27
1,2-Dichloro-1,1,2,2-										
tetrafluoroethane (CFC 114)	2.0	Ū	Ŭ	U	_ U	Ū	U	U	U	U
Vinyl Chloride	2.0	Ü	U	U	U	U	บ	U	Ü	U
1,3-Butadiene	2.0	U	U	Ü	U	U	U	U	U	U
Chloroethane	2.0	Ü	U	U 2.2	U	U 24	U 10	U	. U	Ŭ 3.3
Acetone	10	22 U	5.2 U	U	69 U	U	U	U	U	J.J
Trichlorofluoromethane	2.0	U	U	Ü	Ü	U	U.	U	Ü	U
1,1-Dichloroethene Methylene Chloride	5.0	Ü	ט	Ü	-U	U	- U		70 -	บ
Trichlorotrifluoroethane	2.0	U.	Ü	Ü	U	Ü	U	Ū	U	U
trans-1,2-Dichloroethene	2.0	U	U	Ü	U	U	Ü	U	Ü	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	Ü	UJ	UJ	Ü	נט	UJ
2-Butanone (MEK)	2.0	Ü	Ü	U	4.8 J	2.0 J	0.67 J	U	Ü	บ
cis-1,2-Dichloroethene	2.0	Ü	Ü	υ	U	U	Ü	5.4	1.8	9.46
n-Hexape	2.0	6.0 U	1.4 U	0.40 U	52	21	6.0	13 U	4.3 U	1.2 U
Chloroform	2.0	U	Ü	Ū	U	U	Ü	Ū	U	Ü
1,2-Dichloroethane	2.0	U	U	Ü	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	Ü	บ	U	υ	U	U	U	U	U
Benzene	2.0	4.8	1.1	0.35	3.2	1.3	0.41	2.1	0,71	0.22
Carbon Tetrachloride	2.0	Ü	Ü	Ŭ	U	U	Ü	U	U	Ü
1,2-Dichloropropane	2.0	ש	U	U	U	U	U	ָט	U	บ
Bromodichloromethane	2.0	υ	U	U	Ü	U	U	Ū	U	U
Trichloroethene	2.0	Ü	U	Ü	2.2	0.89	0.17	8.5	2.9	0.54
1,4-Dioxane	2.0	Ü	บ	Ü	U	บ	Ü	Ü	U	Ü
2,2,4-Trimethylpentane (Isooctane)	2.0	Ü	Ü	Ü	U	U	U	Ü	Ų	Ü
n-Heptane	2.0	Ü	U	U	Ü	U	U	U	ŭ	Ü
4-Methyl-2-pentanone	2.0	บ	U	Ü	Ü	Ũ	U	Ü	U	U
1,1,2-Trichloroethane	2.0	υ	U	U	Ü	U	U	Ü	U	U
Toluene	2.0	ับ	U	Ü	19	7.6	2.0	4.3 U	1.4 U	0.38 U
2-Hexanone	2.0	Ü	U	U	U	U	U	U	U	Ü
Dibromochloromethane	2.0	U	Ü	U	Ü	Ū	U -	Ü	. U	บ
1,2-Dibromoethane n-Octane	2.0	บ	U	Ū	2.8	1.1	0.24	U	U	U U
Tetrachloroethene	2.0	ŭ	U	υ	U	U	U.24	U	U	υ
Chlorobenzene	2.0	U	U	U	U	U	Ü	10	3.5	0.75
Ethylbenzene	2.0	Ü	U	U	Ŭ	U	U	U	U	U
m,p-Xylenes	4.0	Ū	U	, U	Ü	υ	U	U	U	U
Bromoform	2.0	υ	U	Ü	U	U	U	- <u>U</u>	U	U
Styrene	2.0	Ū	Ü	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	Ü	บ	Ü	5.1	1.7	0.40
n-Nonane	2.0	Ü	U	Ü	· ʊ -	Ü	U	บ	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	Ü	U	U	U	U	· U
Cumene	2.0	Ű	U	U	ŭ	U	Ŭ.	3.4	1.2	0.24
n-Propylbenzene	2.0	บ	U	U	U	U	U	9.5	3.2	0.65
3-Ethyltoluene	2.0	U	U	U	3.3	1.3	0.27	23	7.9	1.6
4-Ethyltohiene	2.0	U	Ü	Ü	U	Ü	U	11	3.7	0.75
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	บ	12	4.1	0.84
2-Ethyltoluene	2.0	Ü	U	ָ <u></u> "U	Ü	Ŭ	Ŭ	9.3	3.2	0.64
1,2,4-Trimethylbenzene	2.0	U	U	U	6.1	2.5	0.51	44	15	3.0
n-Decane	2.0	5.2 U	1.2 U	0.21 U	38 U	16 U	2.7 U	9.5 U	3.2 U	0.55 U
1,3-Dichlorobenzene	2.0	Ü	Ü	Ü	Ü	U	U	Ü	U	U
1,4-Dichlorobenzene	2.0	Ü	U	Ü	U	U	U	8.8	3.0	0.49
4-Isopropyltoluene (p-Cymene)	2.0	. U	U	U	U	U	U	Ü	U	Ü
1,2,3-Trimethylbenzene	2.0	U	U	U	Ų	Ü	U	12	3.9	0.80
1,2-Dichlorobenzene	2.0	U	U	Ų	4.3	1.8	0.29	38	13	2.2
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	Ü	U	Ü
Naphthalene	2.0	Ų	U	U	U U	U	บ	ñ	U	U
Hexachlorobutadiene	2.0	U			I	L	_ · ·	L U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume,molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter-ng/L=ug/m3.

ug/m3 to ppby: conc. In ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Sample ID Date Sample Volume (iters) Name: Sample Volume (iters) Name: Dichlorodifluoromethane (CFC 12) 1,2-Dichloro-1,1,2,2- tetrafluoroethane (CFC 114) Vinyl Chloride 2.0 1,3-Butadiene 2.0 Chloroethane 2.0 Acetone 10 Trichlorofluoromethane 2.0 1,1-Dichloroethene 2.0 Methylene Chloride 5.0 Trichlorottifluoroethane 2.0 Methylene Chloride 5.0 Trichlorottifluoroethane 2.0		21-041212 4/12/2012 3.71 Liter Air U U U U U U U U U U U U U U U U U U U		us/Tube U U U U U	041212-0 4/12/2012 NA Air ug/m U U U U	EPECVA) U U U
Name	7006 U U U U U U 18 U U U	Air 0 U U U U U U U U U U U U U U U U U U U	U U U U 2,1	บ บ บ บ	Air ug/m² U U U U	บ บ บ
Maint John Main	U U U U U U U U	U U U U U U U U U	U U U U 2,1	บ บ บ บ	ug/m² U U U U	บ บ บ
Dichlorodifinoromethane (CFC 12) 2.0 1,2-Dichloro-1,1,2,2- tetrafhorocethane (CFC 114) 2.0 Vinyl Chloride 2.0 1,3-Butadiene 2.0 Chloroethane 2.0 Acetome 10 Trichlorofhoromethane 2.0 1,1-Dichloroethene 2.0 1,1-Dichloroethene 2.0 Methylene Chloride 5.0 Trichlorotrifhororethane 2.0 Trichlorotrifhoroethane 2.0 Trichlorotrifhoroethane 2.0 Trichlorotrifhoroethane 2.0 Trichlorotrifhoroethane 2.0	U U U U U U U U	U U U U U 4.9 U	U U U U 2,1	บ บ บ บ	บ บ บ บ	บ บ บ
Dichlorodifhoromethane (CFC 12) 2.0 1,2-Dichloro-1,1,2,2-tetrafhoroethane (CFC 114) 2.0 Vinyl Chloride 2.0 1,3-Butadiene 2.0 Chloroethane 2.0 Acetone 10 Trichlorofhoromethane 2.0 1,1-Dichloroethene 2.0 Methylene Chloride 5.0 Trichlorotifhoroethane 2.0 Chlorotifhorotifhoroethane 2.0 Chloride 2.0 Chlorotifhorotifhoroethane 2.0 Chloride 2.0 Chlorotifhorotifhoroethane 2.0 Chlorotifhorotifhoroethane 2.0 Chlorotifhorotifhoroethane 2.0 Chlorotifhorotifhorotethane 2.0 Chlorotifhorotifhorotethane 2.0 Chlorotifhorotifhorotethane 2.0 Chlorotifhorotifhorotethane 2.0 Chlorotifhorotifhorotethane 2.0 Chlorotifhorotethane 2.0 Chlorotifhorotifhorotethane 2.0 Chlorotifhorotethane 2.0 Chlorotifhorotethane 2.0 Chlorotifhorotethane 2.0 Chlorotifhorotethane 2.0 Chlorotifhorotethane 2.0 Chlorotethane 2.0 Chlorotet	U U U U U U U U	U U U U U 4.9 U	U U U U 2,1	บ บ บ บ	บ บ บ	U U U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114) 2.0 Vinyl Chloride 2.0 1,3-Butadiene 2.0 Chloroethane 2.0 Acetone 10 Trichlorofhoromethane 2.0 1,1-Dichloroethene 2.0 Methylene Chloride 5.0 Trichloroftfuoroethane 2.0	U U 18 U U U U U	U U U 4.9 U	U U U 2,1	บ บ บ	U U	U U
Vinyl Chloride 2.0 1,3-Butadiene 2.0 Chloroethane 2.0 Acetone 10 Trichlorofhoromethane 2.0 1,1-Dichloroethene 2.0 Methylene Chloride 5.0 Trichlorotrifhoroethane 2.0	U U U U U	U U 4.9 U	U U 2.1	บ บ	U U	U
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trans-1,2-Dichloroethene 2.0		U	U	U	ŭ	U
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2-Butanone (MEK) 2.0	Ü	U	Ü	U	U	U
cis-1,2-Dichloroethene 2.0	U	U	U	U	U	U
n-Hexane 2.0	U	U	U	4.8	U	U
Chloroform 2.0	Ü	U	U	Ü	U	U
1,2-Dichloroethane 2.0	U	U	U	U	Ü	Ų
1,1,1-Trichloroethane 2.0	U	U	U U	บ	U	บ
Benzene 2.0	Ü				Ü	Ü
Carbon Tetrachloride 2.0	U	U	U	U	Ü	บ
1,2-Dichloropropane 2.0 Bromodichloromethane 2.0	Ü	บ	U	ט	Ü	บ
Bromodichloromethane 2.0 Trichloroethene 2.0	Ü	U	U	U	U	U
1,4-Dioxane 2.0	U	_ U	Ü	U	U	บ
2,2,4-Trimethylpentane (Isooctane) 2.0	Ü	U	U	U	U	U
n-Heptane 2.0	υ	Ü	Ü	U	U	U
4-Methyl-2-pentanone 2.0	U	Ü	U	Ū	U	Ü
1.1.2-Trichloroethane 2.0	ΰ	U	U	U	U	U
Toluene 2.0	Ū	U	U	2.3	U	U
2-Hexamone 2.0	Ū	U	U	U	U	U
Dibromochloromethane 2.0	Ü	U	U	U	U	U
1,2-Dibromoethane 2.0	U	U	Ü	_ U	U	Ü
n-Octane 2.0	Ù	U	U	U	U	U
Tetrachloroethene 2.0	U	Ü	U	Ü	U	U
Chlorobenzene 2.0	Ű	ับ	U	υ	U	U
Ethylbenzene 2.0	U	U	U	U	Ü	U
m,p-Xylenes 4.0	U	Ü	Ü	U	U	U
Bromoform 2.0	Ü	U	U	U	U	U
Styrene 2.0	U	Ü	U	υ	Ü	U
o-Xylene 2.0	Ú	Ü	U	U	Ü	Ü
n-Nonane 2.0	Ü	U	U	U	U	U
1,1,2,2-Tetrachloroethane 2.0	U	U	U	U	Ü	U
Cumene 2.0	U	บ	บั	U	U	U
n-Propylbenzene 2.0 3-Ethyltoluene 2.0	Ü	U	Ü	ט	Ü	U,
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4-Ethyltoluene 2.0 1,3,5-Trimethylbenzene 2.0	U	U	U	U	U	U
2-Ethyltoluene 2.0	Ü	Ū.	U	υ	U	U
1,2,4-Trimethylbenzene 2.0	Ü.	Ü	U	บ	U	U
	5.6 U	1.5 U	0.26 U	14	U	U
1,3-Dichlorobenzene 2.0	U	U	U	U	Ü	U
1,4-Dichlorobenzene 2.0	U .	U	U	Ü	U	U
4-Isopropyltoluene (p-Cymene) 2.0	U	Ū	U	Ü	U	U
1,2,3-Trimethylbenzene 2.0	Ü	U	Ü	บ	U	U
1,2-Dichlorobenzene 2.0	U	U	U ·	U	U	U
1,2,4-Trichlorobenzene 2.0	Ü	U	U	Ü	ΰ	Ü
Naphthalene 2.0	Ü	U	U	υ	U	Ü,
Hexachlorobutadiene 2.0	Ü	U	U	U	U	.U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

nig/m3 to ppby: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

Attachment C-3:

Chain of Custody Records

Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

FRB: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 No: 2-031312-173304-0002

DateShipped: 3/13/2012 Lab: Columbia Analytical Services 732-906-6886

Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	AA-001-031312- 001	AA-001	Voc	Air	3/13/2012	11:22	1	TD Carbo 300 sorbent	4 C	
	AA-001-031312- 002	AA-001	Voc	Air	3/13/2012	14:11	1	TD Carbo 300 sorbent	4 C	
	AA-002-031312- 001	AA-002	VOC	Air	3/13/2012	11:15	1	TD Carbo 300 sorbent	4 C	
	AA-002-031312- 002	AA-002	VOC	Air	3/13/2012	14:08	1	TD Carbo 300 sorbent	4 C	
	AA-003-031312- 001	AA-003	Voc	Air	3/13/2012	11:17	. 1	TD Carbo 300 sorbent	4 C	
	FB-031312-001	Outside Site Trailer	VOC	Air	3/13/2012	13:00	1	TD Carbo 300 sorbent	4 C	
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	SAMPLES TRANSFERRED FROM
Special Instructions: 48 hr Turn Around Time	CHAIN OF CUSTODY#

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF CUSTODY RECORD

RFP: 214 Contact Name: Brittney Kelly

Contact Phone: 908-565-2975

PIZWAGO

No: 2-031412-194515-0005

DateShipped: 3/13/2012 Lab: Columbia Analytical Services

732-906-6886

Lab#	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Num b Cont	Container	Preservati ve	Start Flow Rate	Volu me	Vol Units	MS/N SD
0	AA-000-031412- 001	AA-000	VOC	Air	3/14/2012	09:36	1	TD Carbo 300 sorbent	4 C	0.107 8	. ,	Liters	i
9	AA-001-031412- 001	AA-001	voc	Air	3/14/2012	10:27	1	TD Carbo 300 sorbent	4 C	0.102 3	4.01	Liters	
3	AA-002-031412- 001	AA-002	voc	Air	3/14/2012	10:31	1	TD Carbo 300 sorbent	4C ,	0.103 4	4	Liters	
9	AA-004-031412- 001	AA-004	voc	Air	- 3/14/2012	14:15	1	TD Carbo 300 sorbent	4C	0.106 5	. 4	Liters	
6	AA-005-031412- 001	AA-005	Voc	Air	3/14/2012	14:06	1	TD Carbo 300 sorbent	4 C	0.096	4	Liters	1
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Special Instructions: 48 hr Turn Around Tir	ne	· -	·	SAMPLES TRANSFERRED FROM	
				CHAIN OF CUSTODY#	-
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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Removal Action Section Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975

P1201018

No: 2-031512-182913-0007

Date Shipped: 3/15/12

Lab: Columbia Analytical Services

732-906-6886

Lab#	Sample #	Location	Analyses	Matrix	Collected	Start_Tim	Stop_Tim e	Numb Cont	Container	Preservative
	AA-006-031512- 001	AA-006	voc	Air	3/15/2012	10:09:00 AM	10:49:00 AM	1	TD Carbo 300 sorbent	4 C
(2)	AA-007-031512- 001	AA-007	VOC	Air	3/15/2012	10:13:00 AM	10:53:00 AM	1	TD Carbo 300 sorbent	4 C
0	AA-008-031512- 001	AA-008	VOC	Air	3/15/2012	10:07:00 AM	10:47:00 AM	1	TD Carbo 300 sorbent	4 C
(4)	FB-031512-001	Outside Site Trailer	VOC	Air	3/15/2012			. 1	TD Carbo 300 sorbent	4 C
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Special Instructions: 7 day turn around time. Please email results to Brittney Kelly@westonsolutions.com. Analytical results should be in ppbv. Thank you.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Date Shipped: 3/19/12 Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

be in ppbv. Thank you.

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 P1201058

No: 2-031912-170842-0010

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

AirbillNo: 864048331690 Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Lab#	Sample #	Location	Sub Location	Analyses	Matri	Collected	Sample Time	Container	Volum e	Vol Units	Avg_Flo	Flow_Unit	Preservat ve
1	AA-009-031912- 001	AA-009	Dump Area E	VOC	Air	3/19/2012	14:20	TD Carbo 300:sorbent	4	Liters	0.1009	mL/min	4 C
(2)	AA-010-031912- 001	AA-010	Dump Area D SE	voc	Air	3/19/2012	14:20	TD Carbo 300 sorbent	4.42	Liters	0.1229	mL/min	4 C
(3)	AA-011-031912- 001	AA-011	Dump Area D SW	VOC	Air	3/19/2012	14.17	TD Carbo 300 sorbent	3.71	Liters	0.0928	mL/min	4 C
0	FB-031912-001	Outside Site Trailer		voc	Air	3/19/2012	15:15	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All items for analysis	PSHO	3/14/12	WATEROOF	3/10/12	ogra						-
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Special Instructions: 48 hr turn around time. Please email results to Brittney Kelly@westonsolutions.com. Analytical results should

Date Shipped: 3/19/12 Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-914-5716

PIZOIIZA No: 2-032212-140609-0011

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

AirbillNo: 8640448331704 Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Lab#	Sample #	Location	Sub Location	Analyses	Matri x	Collected	Sample Time	Container	Volum e	Vol Units	Avg_Flo w	Flow_Unit	Preservati ve
0	AA-012-032212- 001	AA-012	Dump Area B NW	VOC	Air	3/22/2012	12:27	TD Carbo 300 sorbent	4.26	Liters	0.1066	mL/min	4 C
2	AA-013-032212- 001	AA-013	Dump Area B W	voc	Air	3/22/2012	12:31	TD Carbo 300 sorbent	4.22	Liters	0.1054	mL/min	4 C
3	AA-014-032212- 001	AA-014	Dump Area B SE	voc	Air	3/22/2012	12:37	TD Carbo 300 sorbent	4.16	Liters	0.1039	mL/min	4·C
(3)	FB-032212-001	Outside Site Trailer	\	voc	Air	3/22/2012	11:00	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Special Instructions: 48 hr turn around time. Please email results to Brittney.Kelly@westonsolutions.com. Analytical results should be in ppbv. Thank you.

Date Shipped: 3/19/12
Weston Solutions, Inc.
1090 King Georges Post Rd
Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214
Contact Name: Brittney Kelly
Contact Phone: 908-914-5716

91201139

No: 2-032312-124758-0012

AirbiliNo: 857852545102 Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Lab#	Sample #	Location	Sub Location	Analyses	Matri x	Collected	Sample Time	Container	Volum	Vol Units	Avg_Flo	Flow_Unit	Preservati ve
A)	AA-009-032312- 001	AA-009	Dump Area E	voc	Air	3/23/2012	12:10	TD Carbo 300 sorbent	3:97	Liters	0.0993	mL/min	4 C
(2)	AA-014-032312- 001	AA-014	Dump Area B SE	voc	Air	3/23/2012	12:15	TD Carbo 300 sorbent	3.78	Liters	0.0944	mL/min	4 C
3	AA-015-032312- 001	AA-015	Dump Area C NE	voc	Air	3/23/2012	12:06	TD Carbo 300 sorbent	4	Liters	0:1001	mL/min	4 C
D	FB-032312-001	Outside Site Trailer		voc	Air	3/23/2012	10:45	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Special Instructions: 48 hour turn around time. Please include results in EDD format. Thank you.

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SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

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Date Shipped: 3/19/12 Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 P1201180

No: 2-032612-134722-0013

AirbillNo: 857852545113

Lab: Columbia Analytical Services Lab Phone: 805-526-7161

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Lab#	Sample #	Location	Sub Location	Analyses	Matri ×	Collected	Sample Time	Container	Volum	Vol Units	Avg_Flo w	Flow_Unit	Preservati ve
0	AA-005-032612- 001	AA-005	Dump Area D NE	voc	Air	3/26/2012	10:10	TD Carbo 300 sorbent	4,29	Liters	0.1072	mL/min	4 C
	AA-011-032612- 001	AA-011	Dump Area D SW	VOC	Air	3/26/2012	10:20	TD Carbo 300 sorbent	4.13	Liters	0.1033	mL/min	4C
3	AA-016-032612- 001	AA-016	Dump Area D W	voc	Air	3/26/2012	10:25	TD Carbo 300 sorbent	4.04	Liters	0.1009	mL/min	4 C
(4)	AA-017-032612- 001	AA-017	Dump Area D S	voc	Air	3/26/2012	10:15	TD Carbo 300 sorbent	3.98	Liters	0.0995	mL/min	4 C
3	FB-032612-001	Outside Site Trailer		VOC	Air	3/26/2012	07:30	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

Date Shipped: 3/27/12 Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 P1201202

No: 2-032712-152046-0015

AirbillNo: 873981760011

Lab: Columbia Analytical Services

Lab Phone: 908-789-8900

Lab#	Sample #	Location	Sub Location	Analyses	Matri	Collected	Sample Time	Container	Volum	Vol Units	Avg_Flo w	Flow_Unit	Preservati ve
1	AA-006-032712- 001	AA-006	Dump Area D NW	voc	Air	3/27/2012	13:29	TD Carbo 300 sorbent	4.38	******	0.1094	mL/min	4 C
9	AA-009-032712- 001	AA-009	Dùmp Area E	voc	Air	3/27/2012	09:40	TD Carbo 300 sorbent	4.35	Liters	0.1242	mL/min	4 C
3	AA-017-032712- 001	AA-017	Dump Area D S	voc	Air	3/27/2012	13:25	TD Carbo 300 sorbent	4.52	Liters	0.113	mL/min	4 C
B	AA-018-032712- 001	AA-018	Dump Area D NE	VOC	Air	3/27/2012	13:35	TD Carbo 300 sorbent	3.96	Liters	0.0991	mL/min	4 C
3	FB-032712-001	Outside Site Trailer		VOC	Air	3/27/2012	07:30	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you. Sole CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Date Shipped: 3/28/12 Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 P1201217

No: 2-032812-165122-0017

AirbillNo: 873981760022

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

ab#	Sample #	Location	Sub Location	Analyses	Matri	Collected	Sample	Container	Volum	Vol	Avg_Flo	Flow_Unit	
	AA-006-032812- 001	AA-006	Area D NW	voc	Air	3/28/2012	10:10	TD Carbo 300 sorbent		Liters	0.0952	mL/min	4 C
[2]	AA-010-032812- 001	AA-010	Area D SE	voc	Air	3/28/2012	10:16	TD Carbo	4.11	Liters	0.1028	mL/min	4 C
3	AA-016-032812- 001	AA-016	Area D DW	voc	Air	3/28/2012	10:22	TD Carbo 300 sorbent	4.3	Liters	0.1076	mL/min	4 C
0	FB-032812-001	Outside Site Trailer	, ,	voc	Air	3/28/2012	07:30	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	T Date	Department to	·····	·
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Date Shipped: 3/29/12

Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 **CHAIN OF CUSTODY RECORD**

RFP: 214

Contact Name: Britiney Kelly Contact Phone: 908-565-2975 91201232

No: 2-032912-172441-0019

AirbillNo: 873981760033

Lab: Columbia Analytical Services

I ah Pihana	805-526-7161
Lab Phone:	000-020-7-101

Lab#	Sample #	Location	Sub Location	Analyses	Matri x	Collected	Sample Time	Container	Volum	Vol Units	Avg_Flo	Flow_Unit	Preservati ve
0	AA-009-032912- 001	AA-009	Dump Area E	VOC	Air	3/29/2012	09:57	TD Carbo 300 sorbent	4.07	Liters	0.1017	mL/min	4 C
(2)	AA-010-032912- 001	AA-010	Area D SE	VOC	Air	3/29/2012	10:05	TD Carbo 300 sorbent	3.59	Liters	0.1026	mL/min	4 C
3	AA-017-032912- 001	AA-017	Dump Area D S	VOC	Air	3/29/2012	13:25	TD Carbo 300 sorbent	3.96	Liters	0.099	mL/min	4 C
0	AA-018-032912- 001	AA-018	Dump Area D NE	VOC	Air	3/29/2012	10:08	TD Carbo 300 sorbent	3.52	Liters	0.1034	mL/min	4 C
E	FB-032912-001	Outside Site Trailer	,	VOC	Air	3/29/2012	09:30	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

SAMPLES TRANSFERRED FROM
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Date Shipped: 3/30/12

Weston Solutions, Inc.

1090 King Georges Post Rd

Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly

Contact Phone: 908-565-2975

P1202135

No: 2-033012-135904-0020

AirbillNo: 873981760044

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Lab#	Sample #	Location	Sub Location	Analyses	Matri X	Collected	Sample Time	Container	Volum e	Vol Units	Avg_Flo	Flow_Unit	Preservat ve
0	AA-000-033012- 001	AA-000	Outside Site Trailer	voc	Air	3/30/2012	08:04	TD Carbo 300 sorbent		Liters	0.0975	mL/mln	4 C
0	AA-009-033012- 001	AA-009	Dump Area E	VOC	Air	3/30/2012	11:54	TD Carbo 300 sorbent	3.9	Liters	0.0975	mL/min	4 C
3	AA-010-03012- 001	AA-010	Area D SE	VOC	Air	3/30/2012	12:10	TD Carbo 300 sorbent	4.03	Liters	0.1008	mL/mln	4 C
\mathcal{G}	AA-018-033012- 001	AA-018	Dump Area D NE	voc	Air	3/30/2012	12:05	TD Carbo 300 sorbent	4	Liters	0.1	mL/min	4 C
0	FB-033012-001	Outside Site Trailer		VOC	Air	3/30/2012	09:30	TD Carbo 300 sorbent		Liters		mUmin	4 C
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Date Shipped: 4/03/12 Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 P1201309

No: 2-040312-162203-0021

AirbillNo: 873981760055

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

.ab#	Sample #	Location	Sub Location	Analyses	Matri x	Collected	Sample	Container	Volum	Vol Units	Avg_Flo	Flow_Unit	
D	AA-011-040312- 001	AA-011	Dump Area D SW	voc	Air	4/3/2012	10:46	TD Carbo 300 sorbent	4.56	 	0.1037	mL/min	4 C
0	AA-017-040312- 001	AA-017	Dump Area D S	VOC	Air	4/3/2012	10:41	TD Carbo 300 sorbent	4:16	Liters	0.1039	mL/min	4 C
0	AA-017-040312- 002	AA-017	Dump Area D S	VOC	Air	4/3/2012	14:00	TD Carbo 300 sorbent	4.25	Liters	0.1062	mL/min	4 C
Ð	AA-018-040312- 001	AA-018	Dump:Area D NE	VOC	Air	4/3/2012	13:50	TD Carbo 300 sorbent	3.77	Liters	0.0837	mL/min	4 C
(2)	AA-019-040312- 001	AA-019	Area D NW	VOC	Air	4/3/2012	14:08	TD Carbo 300 sorbent	4.2	Liters	0.1049	mL/min	4 C
B	FB-040312-001	Outside Site Trailer		voc	Air	4/3/2012	09:30	TD Carbo 300 sorbent		Liters		mL/min	4 C
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items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	5	r	·	
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Page 1 of 1

Date Shipped: 4/10/12

Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837 CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Britiney Kelly Contact Phone: 908-565-2975 91201405

No: 2-041012-145759-0022

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

AirbillNo: 873981760066

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Lab#	Sample #	Location	Sub Location	Analyses	Matri x	Collected	Sample Time	Container	Volum	Voi Units	Avg_Flo	Flow_Unit	Preservat ve
	AA-010-041012- 001	AA-010	Area D SE	voc	Air	4/10/2012	12:18	TD Carbo 300 sorbent	3.99	Liters	0.0998	mL/min	4 C
T	AA-010-041012-) 002	AA-010	Dump Area D SE	voc	Aír	4/10/2012	13:00	TD Carbo 300 sorbent	3:99	Liters	0.0998	mL/min	4 C
0	AA-017-041012- 001	AA-017	Dump Area D S	voc	Air	4/10/2012	12:20	TD Carbo 300 sorbent	4.32	Liters	0.1079	mL/min	4 C
(F)	AA-017-041012- 002	AA-017	Dump Area D S	VOC	Air	4/10/2012	13:00	TD Carbo 300 sorbent	4.32	Liters	0.1079	mL/min	4 C
3	AA-018-041012- 001	AA-018	Dump Area D NE	VOC	Air	4/10/2012	12:15	TD Carbo 300 sorbent	4.36	Liters	0.109	mL/min	4 C
(b)	AA-FB-041012- 001	Outside Site Trailer		voc	Air	4/10/2012	10:00	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

Page 1 of 1

Date Shipped: 4/11/12 Weston Solutions, Inc. 1090 King Georges Post Rd Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 PIROHZU

No: 2-041112-113436-0023

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY#

AirbillNo: 873981760077

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Lab#	Sample #	Location	Sub Location	Analyses	Matri	Collected	Sample Time	Container	Volum e	Vol Units	Avg_Flo:	Flow_Unit s	Preservati ve
0	AA-010-041112- 001	AA-010	Area D SE	voc	Air	4/11/2012	08:15	TD Carbo 300 sorbent	3.96	Liters	0.0989	mL/min	4 C
0	AA-011-041112- 001	AA-011	Dump Area D SW	voc	Air	4/11/2012	08:20	TD Carbo 300 sorbent	4.22	Liters	0.0937	m L/min	4 C
3	AA-012-041112- 001	AA-012	Dump Area e	VOC	Air	4/11/2012	10:05	TD Carbo	4.15	Liters	0.1038	mL/min	4 C
A	AA-020-041112- 001	AA-020	Dump Area E E	voc	Air	4/11/2012	10:00	TD Carbo 300 sorbent	4.08	Liters	0.102	mL/min	4 C ,
6	FB-041112-001	Outside Site Trailer		voc	Air	4/11/2012	08:00	TD Carbo 300 sorbent		Liters		mL/min	4 C
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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

Page 1 of 1

Date Shipped: 4/12/12
Weston Solutions, Inc.
1090 King Georges Post Rd.
Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 2:14

Contact Name: Brittney Kelly Contact Phone: 908-565-2975 PNO 1447

No: 2-041212-171459-0024

Airbill No: 873981760088
Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Sample #	Location	Sub Location	Analyses	Matri x	Collected	Sample Time	Container	Volum e	Vol Unite	Avg_Flo w	Flow_Unit	Preservati ve
. AA-000-041212- 001	AA-000	Outside Site Trailer	voc	Air	4/12/2012	14:00	TD Carbo 300 sorbent	4.26	Liters	0.1218	mL/min	4 C
AA-011-041212- 001	AA-011	Outside Site Trailer	voc	Air	4/12/2012	10:30	TD Carbo 300 sorbent	2.44	Liters	0.0611	mL/min	4 C
AA-017-041212- 001	AA-017	Outside Site Trailer	voc	Air	4/12/2012	10:33	TD Carbo 300 sorbent	2.96	Liters	0.0741	mL/min	4 C
AA-021-041212- 001	AA-021	Area D N	VOC	Air	4/12/2012	10:37	TD Carbo 300 sorbent	3.71	Liters	0.0928	mL/min	4 C
FB-041212-001	Outside Site Trailer	Outside Site Trailer	voc	Air	4/12/2012	09:36	TD Carbo 300 sorbent		Liters		mL/min	4 C
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	AA-000-041212- 001 AA-011-041212- 001 AA-017-041212- 001 AA-021-041212- 001	AA-000-041212- AA-000 001 AA-011-041212- AA-011 001 AA-017-041212- AA-017 001 AA-021-041212- AA-021 001 FB-041212-001 Outside Site Trailer	AA-000-041212-	AA-000-041212- AA-000 Outside Site VOC Trailer AA-011-041212- AA-011 Outside Site VOC Trailer AA-017-041212- AA-017 Outside Site VOC Trailer AA-021-041212- AA-021 Area D N VOC 001 FB-041212-001 Outside Site Trailer Trailer Outside Site VOC Trailer Area D N VOC Trailer	AA-000-041212-	AA-000-041212- AA-000 Outside Site VOC Air 4/12/2012 AA-011-041212- AA-011 Outside Site Trailer AA-017-041212- AA-017 Outside Site Trailer AA-021-041212- AA-021 Area D N VOC Air 4/12/2012 FB-041212-001 Outside Site Trailer Coutside Site Trailer AA-021-041212- AA-021 Area D N VOC Air 4/12/2012 Trailer AA-04-04-04-04-04-04-04-04-04-04-04-04-04-	AA-000-041212- 001	AA-000-041212-	AA-000-041212- AA-000	AA-000-041212- 0A-000	AA-000-041212- O01 AA-011-041212- O01 AA-011 AA-011 AA-011 Outside Site Trailer VOC Air Air A/12/2012 Air A/12/2012 D1:30 TD Carbo 300 sorbent AA-011 AA-017 Outside Site Trailer AA-017 Outside Site Trailer VOC Air Air A/12/2012 D1:30 TD Carbo 300 sorbent AA-017 Outside Site Trailer AA-017 Outside Site Trailer VOC Air A/12/2012 D1:33 TD Carbo 300 sorbent AA-021 AA-021 AA-021 Area D N VOC Air A/12/2012 D1:37 TD Carbo 300 sorbent AA-021 TD Carbo 300 sorbent AA-021 TD Carbo 300 sorbent D1:41 AA-021 AA-021 AA-021 Area D N VOC Air A/12/2012 D1:37 TD Carbo 300 sorbent AA-021 TD Carbo 300 sorbent AA-021 TD Carbo 300 sorbent AA-021 Area D N VOC Air A/12/2012 D1:37 TD Carbo 300 sorbent AA-021 TD Carbo 300 sorbent AA-021 AA-021 AA-021 Area D N VOC Air A/12/2012 D1:37 TD Carbo 300 sorbent AA-021 AA-021 AA-021 AA-021 AA-021 AA-021 AA-021 Area D N VOC Air A/12/2012 D1:37 TD Carbo 300 sorbent AA-021 AA	AA-000-041212- 001 AA-011-041212- 001 AA-011 Outside Site Traller VOC Air 4/12/2012 10:30 TD Carbo 300 sorbent

Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

Security:

Samples Transferred From

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
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Attachment C-4:

FedEx Airbills

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Recipient's Kate Agricera Phone (805) 526-7161 SATURDAY Delivery (IIII couldn't reflect Signature Required Peckage may be left without a distinguis eignature for disting.) Company Colymbia Arklytical Services Address Z 655 for Cenk now 5 wide A Deput recordangement of the Experiment of the Exper	Your Internal Silling Reference First 24 characters will appear on invoice.	FedEx FedEx Dates FedEx Small Pat and FedEx Book Tube
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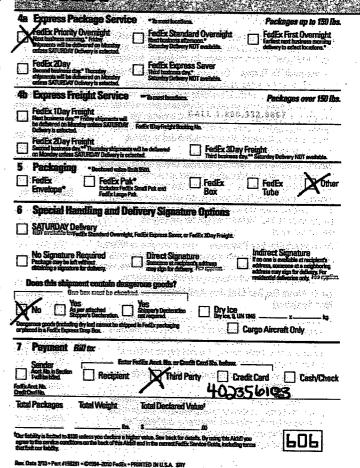
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FedEx 2Day Freight Second business day.** Thursday ablyments will be delivered Intelligence Second business day. FedEx 3Day Intelligence Second business day.	reight ••• Seturday Delivery NOT evaluable.
5 Packaging . Decisional velocitatis (SEO).	- marine
FedEx FedEx Pak* Envelope* FedEx Pak* Includes FedEx Small Pak and FedEx Box	FedEx Dot
6 Special Handling and Delivery Signature Options	
SATURDAY Delivery NOT evaluates for FedEx Standard Overnight, FedEx Express Sever, or FedEx 3Day Freight.	•
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Attachment C-5:

Laboratory Validated Data Packets

Attachment D

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #1

Initial

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

11/30/2011

Reporting Period:

10/20/2011 - 11/30/2011

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category: Operable Unit:

Removal Action

NPL Status: Mobilization Date: NPL

Start Date:

10/20/2011

1/31/2012

Completion Date:

Demob Date: **CERCLIS ID:**

RCRIS ID:

ERNS No.:

NJN000206345

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically

trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The New Jersey Department of Environmental Protection (NJDEP) submitted a request to the EPA, Emergency and Remedial Response Division on October 16, 2009, to evaluate the Mansfield Trail Dump Site for a removal action under CERCLA.

The Site is bound to the north, south, and west by upland woods, and by a former rail line to the east. The area around the Site is primarily residential. The nearest residences are located approximately 400 feet north and west of the Site. An estimated 384 people reside within 0.5 miles of the Site and 3,321 within one mile. The closest schools are located approximately 2,000 feet to the northwest and south. A bus depot is located approximately 300 feet east of the Site on the opposite side of the former rail line, which is situated in a ravine at least 50 feet deep. A high-tension power line right-of-way passes through the middle of the Site in a northeast-southwest direction. The area under the power line, which includes some of the waste disposal areas, is cleared of trees through scheduled routine mowing by the power company.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches.

This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. The original excavated depths of these two trenches ranged from three to five feet. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches, Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site. consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

During the period February through May 2010, EPA collected samples at the Site and from residences in the vicinity of the Site. The effort included the collection of soil (including background locations), waste/sludge samples, and ground water samples from the monitoring wells at the Site; potable water samples (including background locations) from residences along Brookwood and Ross Roads; and one potable water sample from the Byram Intermediate School.

Samples collected from the northern end of the lower trench in Dump Area A, at a depth of 5 to 8 inches, detected TCE 170 milligrams per kilogram (mg/kg or ppm); cis-1, 2-dichloroethylene (cis-1, 2-DCE) (81 ppm); 1, 2-DCB (40 ppm); and 1, 4-DCB (17 ppm), as maximum concentrations. Toluene; trans-1, 2-dichloroethylene (trans-1, 2-DCE); PCE; ethylbenzene; xylene; isopropylbenzene; 1, 3-DCB; and 1, 2, 4-trichlorobenzene (1, 2, 4-TCB) were also detected at lower concentrations. Samples collected from Dump Area B at a depth of one foot were found to contain estimated levels of toluene (36 ppm); chlorobenzene (54 ppm); 1, 3-DCB (7.9 ppm); 1, 4-DCB (130 ppm); 1, 2-DCB (850 ppm); and 1, 2, 4-TCB (42 ppm), as maximum concentrations. Cis-1, 2-DCE; 2-butanone; benzene; TCE; PCE; ethylbenzene; xylene; and 1, 1, 2, 2-tetrachloroethane (1, 1, 2, 2-PCA) were also detected at lower concentrations.

Sixteen of the residences sampled during the period February through May 2010 had wells where the NJDEP had installed POETs due to TCE contamination. These results revealed TCE and cis-1,2-DCE concentrations as high as 71 ppb and 78 ppb, respectively, and low levels of 1, 1, 1-TCA; trans-1, 2-DCE; and 1, 1-dichloroethane (1, 1-DCA). The potable well containing the highest levels of TCE is reportedly 285 feet deep. TCE was not detected in samples collected from five residential wells where previous NJDEP sampling had not detected TCE and where POETs are not utilized. Samples collected from the two downgradient monitoring wells east of the ridge identified vinyl chloride (170 ppb); 1, 1-DCA (20 ppb); DCE (190 ppb); TCA (8.7 ppb); TCE (16 ppb); chlorobenzene (29 ppb); isopropylbenzene (9.7 ppb); 1, 4-DCB (7.5 ppb); and 1, 2-DCB (8.5 ppb). The wells are believed to be down-gradient of Dump Areas B and E.

During May and June 2010, EPA collected soil and waste samples throughout the Site using Geoprobe direct-push technology and hand borings. The effort included the collection of nearly 100 samples throughout the various disposal areas of the Site, including within the trenches at varying depths and around them for purposes of horizontal delineation. Most of the samples were considered grab samples

at specific depths; however composite waste samples, consisting of waste and/or a waste/soil mix, were also collected from various depths across all the test borings within each trench. The samples were screened for VOCs using a Toxic Vapor Analyzer photo-ionization detector (PID) and flame-ionization detector (FID). The laboratory analyses included the Target Compound List (TCL), Target Analyte List (TAL), hexavalent chromium, and Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics.

A discussion of the analytical results for the samples collected in May and June 2010 follows for each of the former disposal areas.

In <u>Dump Area A (lower trench)</u>, four borings were completed and Geoprobe refusal depths were generally between three and four feet, except for one boring which was advanced eight feet. Samples were generally collected between one and two feet in depth, except for the deeper boring, which had an additional sample collected at approximately six to seven feet in depth. All samples from the four borings did not detect any VOCs, including on the northern end where samples previously detected elevated levels of VOCs at shallow depths.

In <u>Dump Area A (upper trench)</u>, four borings were completed and Geoprobe refusal depths—were generally between two and three feet, except for one boring which was advanced eight feet. Samples were generally collected between one and two feet in depth, except for the deeper—boring, which had an additional sample collected at approximately six and seven feet in depth. VOCs were detected in two of the four borings. The maximum concentrations for TCE (2,900 ppm) and 1, 2-DCE (340 ppm) were detected at an approximate depth of seven to eight feet, with lower concentrations detected at the shallower depth. Low levels of the same VOCs were detected in the other boring at a shallow depth. A composite sample of waste material collected from the upper trench over the eight feet identified the presence of TCE at 3,600 ppm and exceeded the RCRA Toxicity Characteristic Leaching Procedure (TCLP) regulatory level of TCE (500 ppb) with a concentration of 13,000 ppb.

In <u>Dump Area B</u>, three borings were completed and Geoprobe refusal depths were between three and seven feet. Samples were generally collected between one and two feet in depth, except for the deeper boring, which had an additional sample collected at approximately seven feet in depth. Samples collected from one of the borings identified the maximum estimated on centrations for TCE (200 ppm), cis-1, 2,-DCE (45 ppm), toluene (37 ppm), 1, 4-DCB (180 ppm), 1, 2-DCB (1,100 ppm), and 1, 2, 4-TCB (29 ppm) between one and two feet in depth. A composite sample of waste material collected from the trench over the seven feet identified that the RCRA TCLP regulatory level of TCE (500 ppb) was approached with a concentration of 450 ppb.

In <u>Dump Area D (Trench 1)</u>, seven borings were completed and Geoprobe refusal depths were between 5 and 18 feet. Samples were collected at various depths within the entire trench, up to 15 feet in depth. VOCs were detected in two of the seven borings. Samples collected from one of the borings identified the maximum concentrations for ethyl benzene (100 ppm) and xylene (187 ppm) at a depth of less than one foot. Cis-1, 2-DCE; 1, 1, 1-TCA; TCE; and PCE were detected at lower concentrations (< than 100 ppb per compound) in this same boring at approximately 7 feet. A composite sample of waste material collected from the trench between one and 11 feet estimated the presence of PCBs at 8 ppm.

In <u>Dump Area D (Trench 2)</u>, three borings were completed and Geoprobe refusal depths were between 11 and 12.5 feet. Samples were collected at various depths within the entire trench, up to nearly 11 feet in depth. VOCs were detected in two of the three borings. The maximum concentrations detected for cis -1, 2-DCE (62 ppm); TCE (260 ppm); toluene (51 ppm); 1, 4-DCB (250 ppm); and 1, 2-DCB (1,500 ppm) were identified between five and six feet in depth in one of the borings. Lower levels of similar compounds were detected both near the surface and near refusal for this boring and near the surface of an adjoining boring. A composite sample of waste material collected from the trench over the 11.5 feet exceeded the RCRA TCLP regulatory level of TCE (500 ppb), with a concentration of 880 ppb, and identified the presence of PCBs at 1.4 ppm.

In <u>Dump Area D (Trench 3)</u>, five borings were completed and Geoprobe refusal depths were between two and six feet. Samples were generally collected within the upper 2.5 feet of the trench. VOCs were detected in three of the five borings. The maximum concentrations detected for cis-1, 2-DCE (42 ppm); TCE (81 ppm); toluene (37 ppm); chlorobenzene (100 ppm); 1, 4-DCB (190 ppm); 1, 2-DCB (1,000 ppm); and 1, 2, 4-TCB (4.8 ppm) were identified within the upper two feet. A composite sample of waste material collected from the trench over the upper four feet identified the presence of TCE at 73 ppm and PCBs at 2 ppm.

In <u>Dump Area D (Trench 4)</u>, three borings were completed and Geoprobe refusal depths were between one and three feet. Samples were collected within the upper 1.5 feet. All samples from the three borings did not detect any VOCs.

In <u>Dump Area E</u>, two borings were completed and Geoprobe refusal depths were between 9 and 15 feet. Samples were collected at various depths within this area, up to approximately 12 feet in depth. The maximum concentrations detected for cis-1, 2-DCE (120 ppm); TCE (220 ppm); toluene (310 ppm); chlorobenzene (97 ppm); total xylenes (270 ppm); 1, 4-DCB (3,700 ppm); 1, 2-DCB (4,900 ppm); and 1, 2, 4-TCB (1,800 ppm) were identified within the upper two feet. Elevated levels of VOCs were also identified between six and seven feet and were detected at low concentrations at a depth of 12 feet. A composite sample of waste material collected from this area between 2 and 12 feet identified the presence of TCE at 430 ppm and 1, 2-DCB at 2,500 ppm.

While elevated levels of VOCs have been detected within the former disposal areas, results for the most part were sporadic. The trenches appear to contain intermixed waste, waste/soil, and soil. This may be due to the manner in which the waste was originally placed in the trenches and/or the use of fill material at various times throughout the history of the operations. With the exception of one detection of TCE (39 ppb) in a subsurface sample collected between Dump Area D and the pathway, all other horizontal delineation samples collected at the Site did not detect any VOCs. Horizontal delineation borings were not advanced in Dump Area E.

Field screening of the samples for VOCs during the sampling event in May/June 2010 using a PID and FID revealed elevated levels of VOC vapors in the subsurface throughout the former disposal areas; however, in particular, in Dump Areas D and E. Readings from the near-surface samples in Dump Area D exceeded 1,000 units above background for both the PID and FID in two of the trenches. Readings from the near-surface samples in Dump Area E approached 3,000 units above background for the FID and exceeded 200 units above background for the PID.

A groundwater sample collected from a shallow; temporary well point installed in Dump Area E, the only location where sufficient groundwater was detected, identified: toluene (380 ppb); chlorobenzene (120 ppb); 1, 4-DCB (410 ppb); and 1, 2-DCB (2,100 ppb). The temporary well point, while only representing screening data and obviously not a source of drinking water, does provide an indication of the significance of the impact that the former waste disposal areas have had to the shallow aquifer at the Site. The concentrations in the temporary well are higher than the Office of Solid Waste and Emergency Response (OSWER) generic RAL for drinking water for 1, 4-DCB (43 ppb) and the federal MCLs for chlorobenzene (100 ppb) and 1, 2-DCB (600 ppb). The monitoring wells at the Site, which represent bedrock flow and are not a source of drinking water, also provide an indication of the impact to groundwater. The concentrations in one of the monitoring wells have exceeded the RAL for vinyl chloride (2 ppb) and the federal MCLs for cis-1,2-DCE (70 ppb) and TCE (5 ppb).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA is currently working with two property owners, New Jersey Department of Transportation/New Jersey Transit (NJDOT) for road access, and Public Service Electric & Gas (PSE&G) to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. EPA has activated the Emergency Removal and Response Services contractor, Environmental Restoration, LLC, to work on the development of site plans and to provide support to obtain access agreements for site entry. EPA met with ER representatives at the Mansfield Trail Dump Site on October 20, 2011, to initiate the development of plans for access to the NJDOT, and to support obtaining access from the New Jersey Transit and private parties.

2.1.2 Response Actions to Date

EPA OSC is working with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil	soil	-		. '	
				-	
		į			-

2.2 Planning Section

2.2.1 Anticipated Activities

EPA has scheduled for December 8, 2012, a Public Availability Session and Public Meeting for the removal activities and to provide an update on remedial activities. EPA has begun the preparation of an Administrative Record for the Removal Action.

2.2.1.1 Planned Response Activities

Once access agreements have been completed by all parties, and site plans have been completed (i.e., work plan, HASP, etc.,) EPA will mobilize support and construction equipment for the excavation of contaminated soil from the disposal trenches.

2.2.1.2 Next Steps

Obtaining access agreements from all necessary parties prior to excavation start will be the next step.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333.

On October 29, 2011, an early snow/ice storm impacted power distribution to the majority of New Jersey. This event required PSE&G to prioritize work during this emergency which delayed working with PSE&G on access until late November 2011.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil.

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	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs			•	

Total Site Costs	\$696,000.00	\$0.00	\$696,000.00	100.00%
Y .				
Intramural Costs	-			
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
TAT/START	\$176,000.00	\$0.00	\$176,000.00	100.00%
IAGs	\$20,000.00	\$0.00	\$20,000.00	100.00%
ERRS - Cleanup Contractor	\$400,000.00	\$0.00	\$400,000.00	100.00%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

At this time there are no personnel working at the Site.

5. Definition of Terms

No information available at this time.

- **6. Additional sources of information**No information available at this time.
- 7. Situational Reference Materials

 No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #2

Progress

Mansfield Trail Dump Site

38

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

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Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

1/31/2012

Reporting Period:

12/5/2011 - 1/31/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

0042

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category:

Removal Action

NPL Status:

NPL

Operable Unit:

01

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

NJN000206345

Completion Date: RCRIS ID:

CERCLIS ID:

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ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

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EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. The original excavated depths of these two trenches ranged from three to five feet. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches.

Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the right-of-way (ROW) / easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement:
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township

Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library. The affadavit for publication was completed on December 13, 2011.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the Emergency Removal and Response Services (ERRS) contractor, Environmental Restoration, LLC, to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil	soil				
	,	. /		, -	

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the mobilization of equipment and support services to begin Site operations. EPA will finalize the work plan and HASP incorporating the conditions as per the PSE&G access agreement.

2.2.1.1 Planned Response Activities

With the completion of site plans and mobilization of equipment, EPA will begin the construction of a staging road for disposal tranportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. Clearing (i.e., trees) and grubbing to the contaminated trenches will begin starting in Trench area B.

With access achieved. EPA will begin posting warning signs and limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

With the completion of clearing/grubbing Trench area B, continue to Trench area E. With the completion of the truck staging road, begin the construction of an access road for heavy equipment to Trench areas B & E.

Provide a subcontract for surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions.

Initiate procurement of the specialized grounding equipment for personnel and heavy equipment operating in the ROW, as per OSHA 1910.333 and the PSE&G access agreement conditions.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month period and is subject to change.

Estimated Costs *

-	Budgeted	Total To Date	Remaining	% Remaining			
Extramural Costs							
ERRS - Cleanup Contractor	\$400,000.00	\$120,871.54	\$279,128.46	69.78%			
IAGs	\$20,000.00	\$0.00	\$20,000.00	100.00%			
TAT/START	\$176,000.00	\$0.00	\$176,000.00	100.00%			
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%			
Intramural Costs	· · · · · · · · · · · · · · · · · · ·						
Total Site Costs	\$696,000.00	\$120,871.54	\$575,128.46	82.63%			

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to

have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #3

Progress

Mansfield Trail Dump Site

38

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

2/13/2012

Reporting Period:

2/1/2012 - 2/13/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category:

Removal Action

NPL Status:

NPL

Operable Unit:

01

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date: CERCLIS ID:

NJN000206345

Completion Date: RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichioroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1-4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. The original excavated depths of these two trenches ranged from three to five feet. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches.

Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it:
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities:
 - 7) Refueling of any vehicle is prohibited on the ROW / easement:
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access

agreements, ER has been tasked to provide site setup and mobilization of support equipment.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library. The affadavit for publication was completed on December 13, 2011.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC was interviewed by the New Jersey Newspaper Star Ledger on site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil	soil				
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				'	

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the mobilization of equipment and support services to begin Site operations. EPA has finalized the work plan and HASP incorporating the conditions as per the PSE&G access agreement.

2.2.1.1 Planned Response Activities

With the completion of site plans and mobilization of equipment, EPA will continue the construction of a staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. Clearing (i.e., trees) and grubbing to the contaminated trenches continues in Trench area B and will start in Trench area E.

EPA posted warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

With the completion of cleaning/grubbing Trench area B, continue to Trench area E. With the completion of the truck staging road, begin the construction of an access road for heavy equipment to Trench areas B & E.

Provide a subcontract for surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions.

Initiate procurement of the specialized grounding equipment for personnel and heavy equipment operating in the ROW, as per OSHA 1910.333 and the PSE&G access agreement conditions.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				1 V 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
ERRS - Cleanup Contractor	\$400,000.00	\$180,075.00	\$219,925.00	54.98%
IAGs	\$20,000.00	\$1,200.00	\$18,800.00	94.00%
TAT/START	\$176,000.00	\$0.00	\$176,000.00	100.00%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs		<i>y</i>		
Total Site Costs	\$696,000.00	\$181,275.00	\$514,725.00	73.95%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #4

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

2/21/2012

Reporting Period:

2/14/2012 - 2/21/2012

1. Introduction

1.1 Background

Site Number:

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA NPL Incident Category:

Removal Action

NPL Status:

1/31/2012

Operable Unit:

10/20/2011

Mobilization Date:

Start Date:

Completion Date:

Demob Date: CERCLIS ID:

NJN000206345

RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement:
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement:
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and. mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas B and E, and initiated in Trench area A.

EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

The U.S. Coast Guard Strike Team (Strike Team) was mobilized on February 14, 2012, to support site safety and air monitoring. The Strike Team is providing air monitoring equipment, i.e., aerial RAE's, which provide remote monitoring capability for volatile organic compounds (VOCs). The instrumentation have been set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil	soil				,
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2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the clearing and grubbing to all trench areas in prepartion for disposal sampling and to provide information of contaminant depth in order to finalize volume estimates for transportation & disposal bids.

2.2.1.1 Planned Response Activities

Perform disposal sampling and provide information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal bids.

The subcontract for specialized surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions has been awarded and will begin the week of February 21, 2012.

EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

Perform disposal sampling and provide information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal bids.

The subcontract for surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions, will perform at a minimum, 2 measurements on separate days to evaluate the potential sag of the 500kV transmission line.

EPA continues the clearing and grubbing to Trench areas Upper and Lower A.

Clearing and grubbing to Trench area D will be dependent on receipt of all grounding equipment and approval from PSE&G as per the access agreement.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$252,788.00	\$147,212.00	36.80%

Total Site Costs	\$696,000.00	\$257,371.00	\$438,629.00	63.02%
2.2				
Intramural Costs				×, .
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
TAT/START	\$176,000.00	\$2,970.00	\$173,030.00	98.31%
IAGs	\$20,000.00	\$1,613.00	\$18,387.00	91.94%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

- 5. Definition of Terms

 No information available at this time.
- **6. Additional sources of information**No information available at this time.
- 7. Situational Reference Materials

 No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #5

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

Ťo:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

2/28/2012

Reporting Period:

2/22/2012 - 2/28/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category:

Removal Action

NPL Status:

NPL

Operable Unit:

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

NJN000206345

Completion Date:

CERCLIS ID: ERNS No.:

RCRIS ID:

FPN#:

State Notification:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpilling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement:
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

Completed representative disposal sampling in Trench areas A, B, C, and E.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operaations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil	soil				
· · · · · · · · · · · · · · · · · · ·					

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the clearing and grubbing to all trench areas in prepartion for disposal sampling and to provide information of contaminant depth in order to finalize volume estimates for transportation & disposal bids.

2.2.1.1 Planned Response Activities

Complete representative disposal sampling of all trenches and provide information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal bids.

Install collection sumps in trenches with standing water to minimize free liquids.

EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

Complete representative disposal sampling and information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal (T&D) bids, and evaluate analytical results to finalize T&D bids.

Await results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment being operated in the ROW as per the PSE&G access agreement. Two measurements on separate days to evaluate the potential sag of the 500kV transmission line will be perfromed.

Clearing and grubbing to Trench area D will be dependent on receipt of all grounding equipment and approval from PSE&G as per the access agreement.

The Removal Support Team (RST) has been tasked to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

Estir	mated Costs *			
-		Budgeted Total To	o Date Remaining	% Remaining

Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$296,594.00	\$103,406.00	25.85%
IAGs	\$20,000.00	\$2,809.00	\$17,191.00	85.96%
TAT/START	\$176,000.00	\$7,359.00	\$168,641.00	95.82%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs	· · · · · · · · · · · · · · · · · · ·			J
Total Site Costs	\$696,000.00	\$306,762.00	\$389,238.00	55.93%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #6

Progress

Mansfield Trail Dump Site

38

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

3/9/2012

Reporting Period:

2/29/2012 - 3/9/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category:

Removal Action

NPL Status:

NPL

Operable Unit: Start Date:

01 10/20/2011

Mobilization Date: Demob Date:

1/31/2012

Completion Date:

CERCLIS ID:

NJN000206345 RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aguifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement:
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil	soil		;		

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the clearing and grubbing to all trench areas in prepartion for disposal sampling and to

provide information of contaminant depth in order to finalize volume estimates for transportation & disposal bids.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C and E, non-hazardous transportation & disposal request for bids were issued. Request for proposal for transportation & disposal of non-hazardous soil has been prepared and will be issued with the receipt of funding.

2.2.1.1 Planned Response Activities

Continue to install collection sumps in trenches with standing water to minimize free liquids.

Begin the stockpiling of non-hazardous waste in Trench area E from Trench A (Upper and Lower).

2.2.1.2 Next Steps

Complete representative disposal sampling and information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal (T&D) bids, and evaluate analytical results to finalize T&D bids.

Clearing and grubbing to Trench area D will be dependent on receipt of all grounding equipment and approval from PSE&G as per the access agreement.

The Removal Support Team (RST) has been tasked to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

ERRS will initiate the removal and stockpiling of soil from Trench Area E (Upper and Lower) to Trench Area E due to restricted working area and limited space available in area A.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$335,492.00	\$64,508.00	16.13%
IAGs	\$20,000.00	\$4,667.00	\$15,333.00	76.67%
TAT/START	\$176,000.00	\$12,694.00	\$163,306.00	92.79%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs				
	3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1			
Total Site Costs	\$696,000.00	\$352,853.00	\$343,147.00	49.30%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #7

Progress

Mansfield Trail Dump Site

38

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

3/16/2012

Reporting Period:

3/10/2012 - 3/16/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category: Operable Unit:

Removal Action

NPL Status: Mobilization Date: **NPL** 1/31/2012

Start Date:

01 10/20/2011

Demob Date:

Completion Date:

CERCLIS ID:

NJN000206345

RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aenal photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited:
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. A ceiling increase of \$500,000 was received on March 13, 2012.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal	
--------------	--------	----------	------------	-----------	----------	--

Contaminated soil (non-hazardous)	soil	•		
Contaminated soil (hazardous)	soil	,	,	

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were issued.

Establish a hazardous and non-hazardous staging area in Trench Area E due to limited acess and room for staging in Trench Area A.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

On March 16, 2012, the Removal Support Team (RST) air sampling results of perimeter (near residentall properties) and excavation operations using T)-17 method, indicated no hits on perimeter results, and very low (<1 ppbv) results within excavation operations. RST will continue to perform perimeter and excavation air sampling during operations.

2.2.1.1 Planned Response Activities

Continue to install collection sumps in trenches with standing water to minimize free liquids.

Begin the stockpiling of non-hazardous waste in Trench Area D (pits #1- #4).

2.2.1.2 Next Steps

The Removal Support Team (RST) has been tasked to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1).

Review and approve transportation and disposal bids for non-hazardous material disposal received on March 16, 2012.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as

defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal (T&D) of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change. An await of \$200,000 to cover the cost of T&D for non-hazardous soils was added.

On March 13, 2012, a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$900,000.00	\$562,709.00	\$337,291.00	37.48%
IAGs	\$20,000.00	\$6,045.00	\$13,955.00	69.78%
TAT/START	\$176,000.00	\$15,644.00	\$160,356.00	91.11%
CLP/Regional Lab	\$100,000.00	\$40,000.00	\$60,000.00	60.00%
Intramural Costs			·	
Total Site Costs	\$1,196,000.00	\$624,398.00	\$571,602.00	47.79%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of

residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NUDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #8

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

3/23/2012

Reporting Period:

3/17/2012 - 3/23/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead: **NPL Status:**

EPA NPL Incident Category: Operable Unit:

Removal Action

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

Completion Date:

CERCLIS ID:

NJN000206345

RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1-4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited:
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

From March 22 - 23, 2012, approximately 551.69 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non- hazardous)	soil	551.69	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were issued awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

Establish a hazardous and non-hazardous staging area in Trench Area E due to limited acess and room for staging in Trench Area A.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock from Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit.

From March 22 - 23, 2012, approximately 551.69 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-3).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-3).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

Await transportation and disposal bids for hazardous material disposal expected to be received on March 27, 2012.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *				
	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs	,			

Total Site Costs	\$1,696,000.00	\$617,805.00	\$1,078,195.00	63.57%
		,		
Intramural Costs			,	
CLP/Regional Lab	\$100,000.00	\$40,000.00	\$60,000.00	60.00%
TAT/START	\$176,000.00	\$36,808.00	\$139,192.00	79.09%
IAGs	\$20,000.00	\$7,485.00	\$12,515.00	62.58%
ERRS - Cleanup Contractor	\$1,400,000.00	\$533,512.00	\$866,488.00	61.89%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

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On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #9

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

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Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

3/30/2012

Reporting Period:

3/24/2012 - 3/30/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA NPL

Incident Category: Operable Unit:

Removal Action

NPL Status: Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

Completion Date:

CERCLIS ID:

NJN000206345 **RCRIS ID:**

ERNS No.:

FPN#:

State Notification: Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

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As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

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- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began (limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22 - 30, 2012, approximately 3,200 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non- hazardous)	soil	3,200 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)	soil			ı	
(

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis.

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis

Between March 22 - 30, 2012, approximately 3,200 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-3).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

2.2.1.2 **Next Steps**

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-3).

Continue T&D of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

A clarified T&D bid for hazardus material was re-issued on March 30, 2012.

Evaluate clean fill bids for restoration operations dependent upon an independent EPA analysis of the material to confirm they meet EPA standards for clean fill.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,400,000.00	\$632,171.00	\$767,829.00	54.84%
IAGs	\$20,000.00	\$9,001.00	\$10,999.00	55.00%
TAT/START	\$176,000.00	\$42,664.00	\$133,336.00	75.76%
CLP/Regional Lab	\$100,000.00	\$40,000.00	\$60,000.00	60.00%
Intramural Costs				
1				
Total Site Costs	\$1,696,000.00	\$723,836.00	\$972,164.00	57.32%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #10

Progress

Mansfield Trail Dump Site

38

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USÉPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

4/5/2012

Reporting Period:

4/2/2012 - 4/5/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category:

Removal Action

NPL Status:

NPL

Operable Unit:

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

Completion Date:

CERCLIS ID: ERNS No.:

NJN000206345 **RCRIS ID:**

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpilling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22, 2012 and April 5, 2012, approximately 3,700 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non- hazardous)	soil	3700 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)	soil				
The same of the second of the			100 100 100 100 100 100 100 100 100 100		

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires

additional excavation (approximately 10 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid is expected to be reviewed and approved the week of April 9, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criticria for protection of groundwater.

Between March 22, 2012 and April 5, 2012, approximately 3,700 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accompdate up to 2,500 additional tons of material with options up to 7,500 tons.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid is expected to be reviewed and approved the week of April 9, 2012.

EPA sampled the proposed vendor clean backfill on April 4, 2012, to confirm they meet EPA standards for clean fill.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager - Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explainig the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,400,000.00	\$744,007.00	\$655,993.00	46.86%
IAGs	\$20,000.00	\$12,500.00	\$7,500.00	37.50%
TAT/START	\$176,000.00	\$55,049.00	\$120,951.00	68.72%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
Total Site Costs	\$1,696,000.00	\$871,556.00	\$824,444.00	48.61%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #11

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

4/13/2012

Reporting Period:

4/9/2012 - 4/13/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

0042

D.O. Number:

Action Memo Date: Response Type:

9/29/2011

Response Authority: CERCLA Response Lead:

EPA

Incident Category:

Time-Critical Removal Action

NPL Status:

NPL

Operable Unit:

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

Completion Date:

CERCLIS ID:

NJN000206345 **RCRIS ID:**

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it:
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non- hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)					

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels; the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criticia for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Excavation activities has uncovered a "dark green material", which is uncharacteristic of the material profiled to-date. Based upon this, samples have been forwarded to the lab for analysis. This material has been segregated from the other non-hazardous waste material until analysis is received.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accompdate up to 2,500 additional tons of material with options up to 7,500 tons.

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2012.

EPA will await analysis of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date. Data should be received on Tuesday, April 17, 2012. This material will continue to be segregated from the other non-hazardous waste material until analysis is received.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

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Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

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Estimated Costs *

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TAT/START	\$176,000.00	\$63,049.00	\$112,951.00	64.18%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40,00%
Intramural Costs		·		
				
Total Site Costs	\$1,696,000.00	\$894,145.00	\$801,855.00	47.28%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

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3. Participating Entities

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EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #12

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

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Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

4/20/2012

Reporting Period:

4/16/2012 - 4/20/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category: **Operable Unit:**

Removal Action

NPL Status:

NPL

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

Completion Date:

CERCLIS ID:

NJN000206345 RCRIS ID:

ERNS No.: FPN#:

State Notification:

Reimbursable Account #:

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1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non- hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)					

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accompdate up to 2,500 additional tons of material with options up to 7,500 tons.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material will continue to be segregated from the other non-hazardous waste material until analysis is received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

EPA received analytical results of the "dark green material", uncovered from excavation activities, which

appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

Additional results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data contine to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On

March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs	, .	,		
ERRS - Cleanup Contractor	\$1,400,000.00	\$719,460.00	\$680,540.00	48.61%
IAGs	\$20,000.00	\$16,500.00	\$3,500.00	17.50%
TAT/START	\$176,000.00	\$63,049.00	\$112,951.00	64.18%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
		,	·,	
Total Site Costs	\$1,696,000.00	\$859,009.00	\$836,991.00	49.35%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovák) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #13

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

4/27/2012

Reporting Period:

4/23/2012 - 4/27/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category:

Removal Action

NPL Status:

NPL

Operable Unit:

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

RCRIS ID:

CERCLIS ID: **ERNS No.:**

NJN000206345

FPN#:

State Notification:

Completion Date:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

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TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

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- The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it:
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non- hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)					

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critical for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accompdate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material

requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3-4, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Checking of CERCLA approval on the non-hazardous low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

Additional results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data contine to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

The ERRS contractor de-mobed from the site on April 25, 2010, and will re-mobe on May 2, 2012 in preparation for shipment and off-site disposal of the hazardous waste stream.

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accompdate up to 2,500 additional tons of material with options up to 7,500 tons. It is estimated that an additional 3,000 tons of non-hazardous material has been stockpiled for T&D, with a potential for up to an additional 2,500 tons, at a minimum.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11,

2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012.

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The ERRS contractor de-mobed from the site on April 25, 2010, and will re-mobe on May 2, 2012 in preparation for shipment and off-site disposal of the hazardous waste stream.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment

which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, and materials anticipated for a 3 month operations period and is subject to change. On April 23, 2012, await for restoration removed to cover T&D costs.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

Estimated Costs *

Estimated Costs	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs		-		
ERRS - Cleanup Contractor	\$1,650,000.00	\$535,344.00	\$1,114,656.00	67.55%

Total Site Costs	\$1,946,000.00	\$683,640.00	\$1,262,360.00	64.87%				
Intramural Costs	1	-		·				
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%				
TAT/START	\$176,000.00	\$71,296.00	\$104,704.00	59.49%				
IAGs	\$20,000.00	\$17,000.00	\$3,000.00	15.00%				

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health

& safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time,

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #14

Progress

Mansfield Trail Dump Site

38

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

5/11/2012

Reporting Period:

5/2/2012 - 5/11/2012

1. Introduction

1.1 Background

 Site Number:
 38

 D.O. Number:
 0042

Contract Number:

EP-S2-10-03 9/29/2011

Response Authority: CERCLA

Action Memo Date: Response Type:

Time-Critical

Response Lead: NPL Status:

EPA NPL

Incident Category: Operable Unit:

Removal Action

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

Completion Date:

CERCLIS ID:

NJN000206345 RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non-hazardous)	soil	4,950 tons	N/Á	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (non-hazardous)	soil	6,400 tons	N/A	N/A	Rolling Hills Landfill Boyertown, PA
Contaminated soil (hazardous - 040)	soil	22.91 tons	008772733JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	sol	24.78 tons	008772734JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.32 tons	008772735JJK	Not required	Wayne Disposal Inc. Belleville, MI

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Contaminated soil (hazardous - 040)	soil	25.71 tons	008772736JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.48 tons	008772737JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.21 tons	008772738JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	22.36 tons	008772739JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	24.00 tons	005233073JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	24.00 tons	005233074JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25,59 tons	008772728JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	30.49 tons	008772729JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	27.34 tons	008772730JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25.94 tons	008772731JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25.06 tons	008772732JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	23.94 tons	005233070JJK	Required	Michigan Disposal, Inc. Belleville, MI

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criticia for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accompdate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

Continued results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data contine to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.1 Planned Response Activities

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI for disposal.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI for treatment and disposal.

During the period between May 7 and May 11, 2012, approximately 3,354 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. With the removal of this material, EPA antiicpates this will complete excavation activities in Trench D.

2.2.1.2 Next Steps

Continue T&D of non-hazardous material to the Rollings Hills Landfill, Boyertown, PA.

Re-grading and restoration activities continue in all trenches completed.

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated, where feasible (i.e., bedrock).

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment

which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager — Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, materials anticipated for a 3 month operations period and T&D, which is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

Estimated Costs *

	Budgeted	Budgeted Total To Date		% Remaining				
Extramural Costs								
ERRS - Cleanup Contractor	\$1,650,000.00	\$755,344.00	\$894,656.00	54.22%				
IAGs	\$20,000.00	\$17,000.00	\$3,000.00	15.00%				
TAT/START	\$176,000.00	\$81,296.00	\$94,704.00	53.81%				
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%				
Intramural Costs								
Total Site Costs	\$1,946,000.00	\$913,640.00	\$1,032,360.00	53.05%				

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #15

Progress

Mansfield Trail Dump Site

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Judith Enck, USEPA Region 2 - RA

Lisa Plevin, USEPA Region 2 -

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

Fred Mumford, NJDEP - BEMSA

From:

Louis DiGuardia, On-Scene Coordinator

Date:

5/25/2012

Reporting Period:

5/14/2012 - 5/25/2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

ÉΡΑ **NPL**

Incident Category: **Operable Unit:**

Removal Action

NPL Status: Mobilization Date:

1/31/2012

10/20/2011

Demob Date:

Start Date:

Completion Date:

CERCLIS ID:

NJN000206345

RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement:
- Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (non-hazardous)	soil	6,174 tons	N/A	Ņ/A	Rolling Hills Landfill Boyertown, PA
Contaminated soil (hazardous - 040)	soil	22.91 tons	008772733JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	şol	24.78 tons	008772734JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.32 tons	008772735JJK	Not required	Wayne Disposal Inc. Belleville, MI

Contaminated soil (hazardous - 040)	soil	25.71 tons	008772736JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.48 tons	008772737JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.21 tons	008772738JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	22.36 tons	008772739JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	24.00 tons	005233073JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	24.00 tons	005233074JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25,59 tons	008772728JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	30.49 tons	008772729JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	27.34 tons	008772730JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25.94 tons	008772731JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25.06 tons	008772732JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	23.94 tons	005233070JJK	Required	Michigan Disposal, Inc. Belleville, MI

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critieria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012 to Wayne Disposal, Inc., Belleville, MI. for hazardous waste (not requiring treatment), and Michigan Disposal, Inc., Belleville, MI (requiring treatment before disposal).

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for

analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill. Re-analysis was requested by the Site RPM due to slightly elevated arsenic levels.

Continued results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data contine to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.1 Planned Response Activities

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas have indicated contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI, for disposal. This completes T&D of this waste stream.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI, for treatment and disposal. This completes T&D of this waste stream.

During the period between May 7 and May 18, 2012, approximately 6,400 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA. This completes T&D of this waste stream.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. Excavation of soil in Trench Area D was completed on May 15, 2012.

2.2.1.2 Next Steps

T&D of non-hazardous material to the Rollings Hills Landfill, Boyertown, PA, was completed on May 18, 2012.

Re-grading and restoration activities continue in all trenches areas.

With the completion of excavation and T&D activities, EPA closed out all air sampling operations.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment

which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the

numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, materials anticipated for a 3 month operations period and T&D, which is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				,
ERRS - Cleanup Contractor	\$1,650,000.00	\$755,344.00	\$894,656.00	54.22%
IAGs	\$20,000.00	\$18,000.00	\$2,000.00	10.00%
TAT/START	\$176,000.00	\$86,006.00	\$89,994.00	51.13%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs	,			
\				
Total Site Costs	\$1,946,000.00	\$919,350.00	\$1,026,650.00	52.76%

^{*} The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to

have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Mansfield Trail Dump Site - Removal Polrep Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject:

POLREP #16

Final

Mansfield Trail Dump Site

38

Stanhope, NJ

Latitude: 40.9289443 Longitude: -74.6995999

To:

Joe Rotola, USEPA Region 2, ERRD-RAB Dan Harkay, USEPA Region 2 ERRD-RAB

Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB

Pat Seppi, U.S. EPA Region 2 George Zachos, USEPA Region 2

Bob McKnight, USEPA Region 2 ERRD-NJB

Mark Herzberg, NJDEP

Beckett Grealish, USEPA Region 2 ERRD-RAB

rom:

Louis DiGuardia, On-Scene Coordinator

Date:

8/28/2012

Reporting Period:

June 1, 2012 - August 28, 2012

1. Introduction

1.1 Background

Site Number:

38

Contract Number:

EP-S2-10-03

D.O. Number:

0042

Action Memo Date:

9/29/2011

Response Authority: CERCLA

Response Type:

Time-Critical

Response Lead:

EPA

Incident Category:

Removal Action

NPL Status:

NPL

Operable Unit:

01

Mobilization Date:

1/31/2012

Start Date:

10/20/2011

Demob Date:

Completion Date:

7/23/2012

CERCLIS ID:

NJN000206345

RCRIS ID:

ERNS No.:

State Notification:

FPN#:

Reimbursable Account #:

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B,C,D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in may 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 - 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at http://epaosc.org/mansfieldtraildump

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that

this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it:
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
 - 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
 - 7) Refueling of any vehicle is prohibited on the ROW / easement;
 - 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly

beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debre around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed

facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

ERRS continued excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas have indicated contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI, for disposal. This completes T&D of this waste stream.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI, for treatment and disposal. This completes T&D of this waste stream.

During the period between May 7 and May 18, 2012, approximately 6,400 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA. This completes T&D of this waste stream.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. Excavation of soil in Trench Area D was completed on May 15, 2012.

Re-grading and restoration activities continued in all trenches areas.

With the completion of excavation and T&D activities, EPA closed out all air sampling operations.

The U.S. Coast Guard Strike Team (Strike Team) completed their duties of air monitoring, health & safety and security support for site operations.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (non-hazardous)	soil	6,174 tons	N/A	N/A	Rolling Hills Landfill Boyertown, PA

Contaminated soil (hazardous - 040)	soil	22.91 tons	008772733JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	sol	24.78 tons	008772734JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.32 tons	008772735JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.71 tons	008772736JJK	Not required	Wayne Disposal Inc. Belleville, Mi
Contaminated soil (hazardous - 040)	soil	25.48 tons	008772737JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.21 tons	008772738JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	22.36 tons	008772739JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	24.00 tons	005233073JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	24.00 tons	005233074JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25,59 tons	008772728JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	30.49 tons	008772729JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	27.34 tons	008772730JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25.94 tons	008772731JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	25.06 tons	008772732JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040	soil	23.94 tons	005233070JJK	Required	Michigan Disposal, Inc. Belleville, MI

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA.

CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup critical for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criticia for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardus soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012 to Wayne Disposal, Inc., Belleville, MI. for

hazardous waste (not requiring treatment), and Michigan Disposal, Inc., Belleville, MI (requiring treatment before disposal).

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill. Re-analysis was requested by the Site RPM due to slightly elevated arsenic levels.

ERRS continued excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas have indicated contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI, for disposal. This completes T&D of this waste stream.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI, for treatment and disposal. This completes T&D of this waste stream.

During the period between May 7 and May 18, 2012, approximately 6,400 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA. This completes T&D of this waste stream.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. Excavation of soil in Trench Area D was completed on May 15, 2012.

Continued results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data contine to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.1 Planned Response Activities

ERRS completed excavation and T&D activities from all trenches.

2.2.1.2 Next Steps

Re-grading and restoration activities continue in all trenches areas. With the completion of excavation and T&D activities, EPA closed out all air sampling operations

ERRS was directed to begin decontamination of all non-essential equipment in preparation for demobilization.

The hydroseeeding contract was issued but delayed until June 26, 2012 due to a period of heavy rains which washed out certain trench areas and prevented re-grading due to excessive mud and water.

Re-grading was completed in all areas and hydroseeding was completed on June 28, 2012.

During the week of July 23, 2012, EPA received copies of all certificates of treatment and disposal from all disposal facilities.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

On June 13, 2012, a site walk was performed with local government representatives, community advisory group, and EPA remedial representatives. The site work was well received by all.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & perdiem, materials anticipated for a 3 month operations period and T&D, which is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

On August 8, 2012, a contract modification (#5) for a ceiling decrease of \$160,000 was received.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

Scott, Martha

From: Sent:

Grunstra, William

To:

Monday, December 31, 2012 10:10 AM
* All ED2 Addresses *; Amend-Babcock, Laura; Feick, Nelson E.

Subject:

Monthly Report

Please submit your December monthly report write-ups to your Group Leaders by Friday, January 4th. The period is from 24 November through 28 December, (5 weeks).

Thanks, Bill.